























EDICION DEL HOSPITAL SAN PATRICIO  
(Administración de Veteranos)

# BOLETIN

DE LA

ASOCIACION MEDICA DE PUERTO RICO

VOL. 49

JULIO, 1957

No. 7

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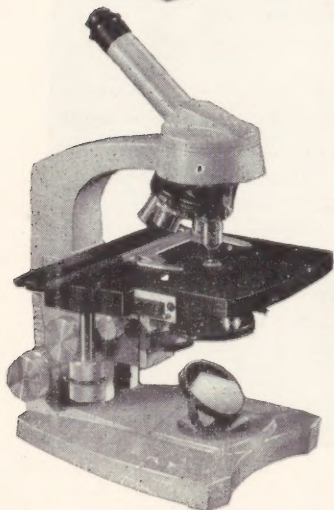
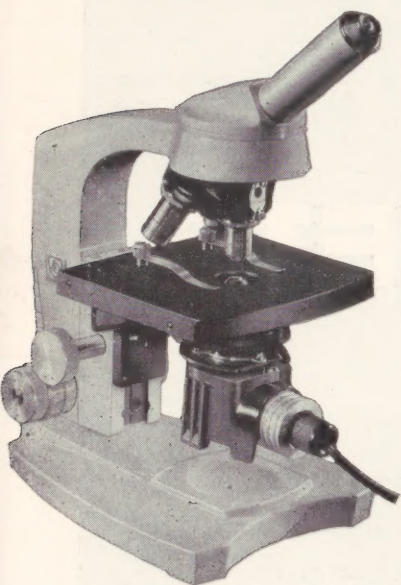
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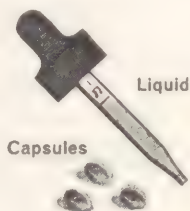
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(1) Wilson, J. L., and Dickinson, D. G.: J. A. M. A. 158: 261, 1955.



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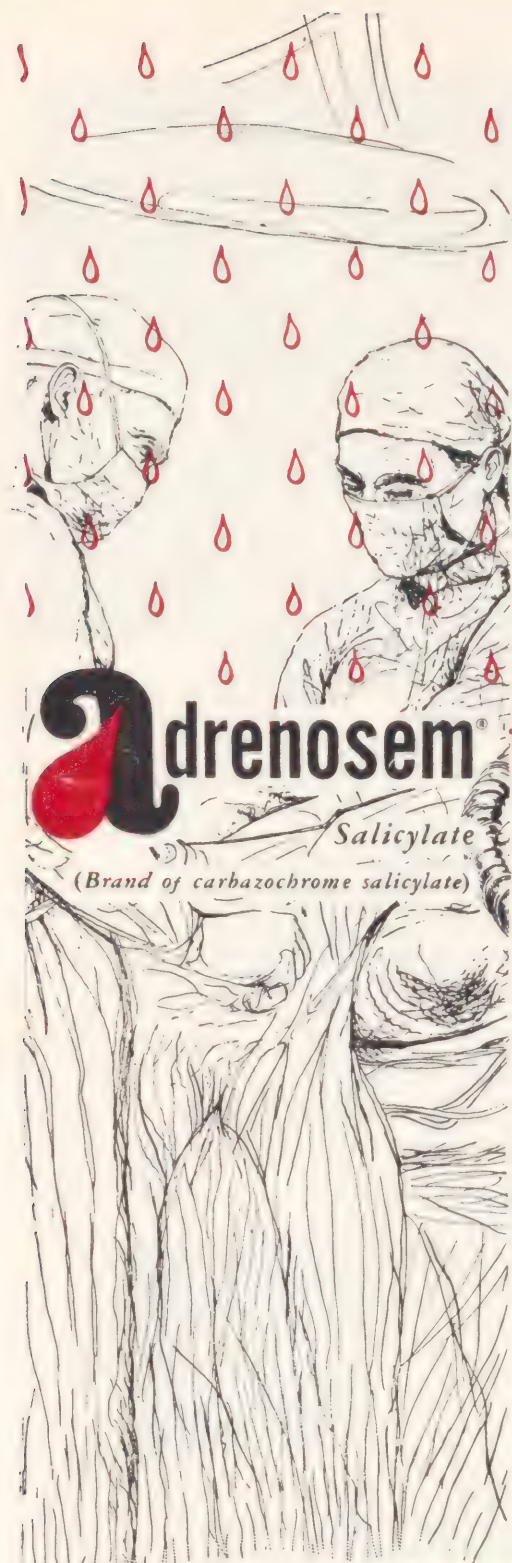
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1. Bacala, J.C.: *The Use of the Systemic Hemostat Carbazochrome Salicylate*, West. J. Surg. 64:88 (1956).

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synergistically enhanced potency  
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overcomes pathogens resistant to other antibiotics  
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<sup>†</sup>Wolfe, M.: From "Opening Remarks", presented at Fourth Antibiotic Symposium, October 17-19, 1956, Washington, D.C., U.S.A

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adrenal  
y  
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c. 100 unidades de AP\*ACTHAR Gel/ por cada 400 mg. de cortisona.
2. Suspéndase el uso del esteroide el día que se administre la inyección.

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MARCA DE FABRICA

PREDNISOLONA-NEOMICINA

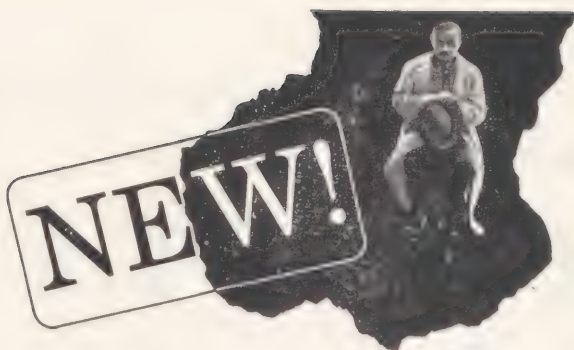
El prurito, la inflamación y otras dolorosas manifestaciones alérgicas ceden rápidamente a la poderosa acción local de la prednisolona... y la neomicina previene, o contribuye a eliminar, las infecciones secundarias que suelen complicar las dermatosis.

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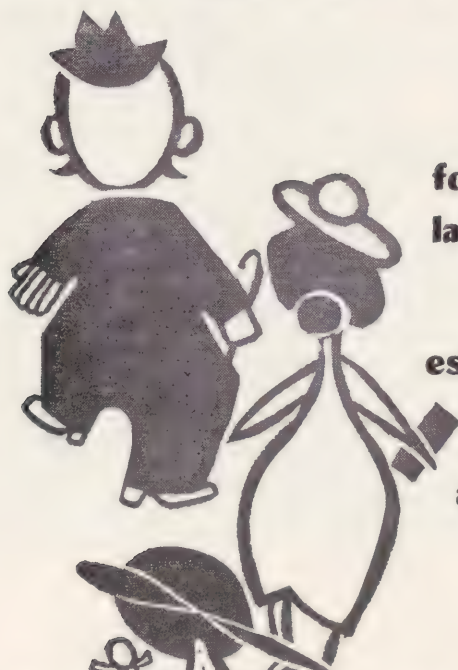
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**estimula la peristalsis normal**

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per lb. of body weight  
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Santurce, P. R.



# BOLETIN

DE LA ASOCIACION MEDICA DE PUERTO RICO

VOL. 49

JULIO, 1957

No. 7

## AN ANALYSIS OF 2000 CONSECUTIVE SIGMOIDOSCOPIC EXAMINATIONS♦

JOSE A. DE JESÚS-SANJUAN, M.D.\*

F. HERNÁNDEZ-MORALES, M.D.\*\*

J. M. TORRES-GÓMEZ, M.D.\*\*\*

J. A. FREIRE, M.D.\*\*\*\*

When we talk about the incidence of this or that other condition, almost invariably we cite statistics collected in the United States. As we gathered our own experiences we began suspecting that the figures obtained in the United States do not necessarily apply here. Prompted by this we have studied and analyzed 2,000 consecutive sigmoidoscopic examinations performed at this hospital. The period comprising these 2,000 examinations extends from July 11, 1950 to April 19, 1956. All our patients were male. The age distribution is shown in Table I.

Four patients had hysterical reactions, and four got off the table after the instrument was introduced. A retrograde examination was performed in a patient with a colostomy because of a stricture 2" above the anus. Biopsy of the rectal mucosa was performed in 868 instances. The results of these biopsies are included among the 1,000 biopsies which are the subject of another report.

The reasons for performing these examinations are tabulated in Table II.

♦ Presented before the Annual Meeting of the P. R. Medical Association, Dec., 1956.

\* Chief, Gastroenterology Section, San Patricio VA Hospital, San Juan, P. R.

\*\* Consultant in Gastroenterology, San Patricio VA Hospital, San Juan, P. R.

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---

Table I  
AGE DISTRIBUTION

Age	No. of Cases
16 — 20	8
21 — 25	209
26 — 30	376
31 — 35	395
36 — 40	227
41 — 45	76
46 — 50	29
51 — 55	46
56 — 60	211
61 — 65	306
66 — 70	80
71 — 75	16
76 — 80	9
81 — 85	4
Not stated	13

---

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Table II  
REASONS FOR EXAMINATION

1. Patient lived in an *S. mansoni* endemic area or he was suspected of having Schistosomiasis for other reasons such as esophageal varices, hepatic dysfunction, spider hemangiomata, splenomegaly, etc.
  2. Unexplained G.I. disturbance.
  3. Hemorrhoids, routine examination prior to surgery in the bowel.
  4. Diarrhea or dysentery.
  5. Rectal bleeding.
  6. Constipation.
-



The findings are enumerated in Table III.

Table III  
FINDINGS

Hemorrhoids of significant degree	214
Polyps	61
Shigellosis	42
Fissures	26
Papillitis	18
Carcinoma	15
Non specific ulcerations	14
Cryptitis	9
Strictures	9
Fistulae	8
Prolapse	7
Chronic ulcerative colitis	7
Sebaceous cyst anus	3
Pruritus anus	3
Atony of sphincter	3
Acute proctitis	2
Extrarectal mass	2
Ischiorectal abscess	2
Melanosia	1
Congenital anomaly	1
Lymphosarcoma	1
Schistosomal granuloma	1

The distance to which the instrument was inserted is recorded in Table IV.

Table IV  
LEVEL OF INTRODUCTION

2"	6
3"	19
4"	58
5"	102
6"	88
7"	62
8"	132
9"	61
10"	1451
Retrograde	1
Not stated	50

There were 15 cases of malignancy: 14 carcinomas and 1 lymphoma. The age distribution is shown in Table V.

Table V  
MALIGNANCY — AGE DISTRIBUTION

32 yrs.	1 Case
36	1
52	1
60	1
62	2
63	3
64	3
66	2
67	1

It is clearly shown by Table V that most of the cases of malignancy were found after 60.

Cancer was within reach of the examining finger in 11 out of the 15 cases. The distance of the malignant growth from the mucocutaneous junction is shown in Table VI.

TABLE VI  
DISTANCE OF CA FROM M.C. LINE

1"	2
2"	3
3"	2
4"	3
5"	3
7"	1
8"	1

On one of these cases the digital examination was done after patient was transferred from another hospital where a biopsied lymph node of the neck revealed metastatic adenocarcinoma.

There were 61 cases of polyps divided as follows:

Single Polyps	42
Multiple Polyps	10
Polyposis	7
Polyps and CA	2

---

61

---



The age distribution in patients with polyps is shown in Table VII.

Table VII

21 — 25	3
26 — 30	9
31 — 35	13
36 — 40	6
41 — 45	3
46 — 50	0
51 — 55	3
56 — 60	8
61 — 65	14
66 — 70	1

The distance of the polyps from the anus was recorded as shown in Table VIII.

Table VIII

1"	0
2"	7
3"	9
4"	11
5"	10
6"	4
7"	3
8"	2
9"	1
10"	2
Not stated	9

The next table shows a comparison of the findings in our series with 500 asymptomatic patients examined at the Yates Clinic:<sup>1</sup>

Table IX

CONDITIONS	YATES	OURS
Hemorrhoids of significant degree	12.8%	10.7%
POLYPS	8.8%	3.05%
Fissures	1.8%	1.3%
Pruritus Ani	1.4%	0.1%
CANCER	1.0%	0.75%
Fistula	.8%	0.4%
Prolapse	.8%	0.35%
Melanosis	.6%	0.05%
Stricture	.2%	0.45%

It must be emphasized that Yates Clinic cases were asymptomatic as far as the GI tract was concerned and our cases were all symptomatic and yet we have a lower incidence of polyps and carcinoma. The incidence of polyps in living patients has been reported from 1.8 to 17% in different papers<sup>1,2,5</sup>. Crumpacker et al found an incidence of 6.7% polyps in 2401 men at the Greenbrier Clinic.<sup>3</sup> In a series of 20,847 asymptomatic cases including children, Wilson found an incidence of 2.8% polyps. The next table shows a comparison of his series with ours.

Table X  
INCIDENCE OF POLYPS

	Wilson	Ours
Total	2.8%	3.05%
Men under 40	2.62%	2.6%
Men over 40	7.68%	3.6%
Over one polyp	8.00%	13.1%

The usual incidence of multiple polyps is 17-35%<sup>1,2,3</sup>. Again we must emphasize that Wilson's cases were asymptomatic, and ours had a definite indication for sigmoidoscopic examination.

#### SUMMARY

Two thousand consecutive sigmoidoscopic examinations performed at this hospital have been analyzed. Biopsy of the rectal mucosa for Schistosomiasis was performed in 868 instances. All but three of the cases of malignancy were over 60 years of age. Cancer was within reach of the examining finger in eleven out of 15 cases. One of these cases was transferred to this hospital because a neck lymph node biopsy showed metastatic adenocarcinoma. The primary growth was within reach of the examining finger. There were two cases in which polyps and carcinoma were associated. The incidence of polyps and carcinoma in our series is lower than in series of asymptomatic patients in the United States even though many of our patients had gastrointestinal symptoms.

#### CONCLUSIONS

The statistical incidence of colonic lesions in the United States does not apply to Puerto Rico.



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## CORONARY INSUFFICIENCY WITH INTRAMURAL MYOCARDIAL INFARCTION

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### INTRODUCTION

Clinical syndromes intermediate between angina pectoris and those usually produced by massive myocardial infarction have been recognized for several years. They have been referred to in the literature by names such as Intermediate Coronary syndrome<sup>1</sup>, Coronary failure<sup>2</sup>, Slight coronary attacks<sup>3</sup> and Coronary insufficiency<sup>4</sup>. The use of the term coronary insufficiency in this sense has been criticized as inappropriate<sup>5</sup>. In order to avoid confusion the term coronary insufficiency will be used in this paper to define a deficit of myocardial blood supply versus myocardial blood demand rather than any resulting clinical syndrome.

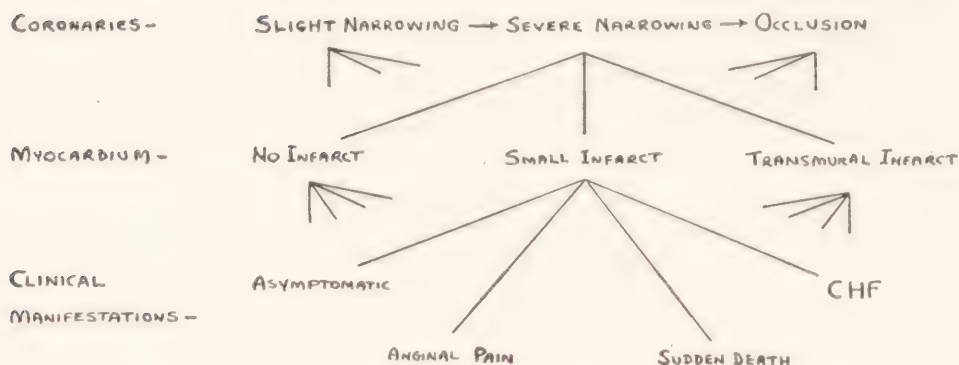
Correlations between the anatomic degree of coronary narrowing and the state of coronary insufficiency are difficult to establish with precision mainly because of the dynamic nature of cardiac function among many other factors. The same may be said of correlations between structural myocardial changes resulting from deficit of coronary blood supply and clinical manifestations. (Fig. 1). Coronary insufficiency may occur with insignificant or slight narrowing when it is secondary to extra-coronary factors such as shock, hemorrhage, arrhythmias, prolonged anoxia, etc.; i.e.: "secondary" or induced coronary insufficiency.<sup>6</sup> On the other hand, the presence of considerable coronary artery obstructive disease has been demonstrated without clinical or myocardial evidence of coronary insufficiency.<sup>7</sup>

Keeping in mind this wide latitude characteristic of coronary artery disease, it may be said that coronary insufficiency of the "primary" or spontaneous<sup>8</sup> type (due primarily to coronary artery disease) is a result of considerable coronary narrowing. While such a state may produce no myocardial necrosis with only transitory myocardial ischemia or may produce massive ventricular infarction with transmural involvement, many of the cases develop a special type of infarct of non-transmural distribution. This infarct is frequently limited to the subendocardial layer, a phenomenon attributed to the relatively great distance that separates this area from the coronary blood source and to the marked squeezing effect of intraventricular and intramural pressure at this point. It may

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FIGURE 1  
CORONARY ARTERY DISEASE



be spotty, localized, scattered, or it may involve the whole ventricular endocardial shell. It may involve sometimes other regions of the myocardial wall as well.

These lesions exhibit characteristics that justify their clinical consideration at a different level from the transmural infarct. They never develop a friction rub and seldom if ever cause shock or thromboembolic complications.<sup>6,7</sup> To distinguish them from transmural infarcts we have called them "small" or "intramural" infarcts. We have insisted on calling these lesions infarcts as indeed they are, in order to avoid the false sense of complacency that might be fostered by the use of terms such as coronary "syndrome" or "insufficiency".

The relatively benign nature of these infarcts as compared to the transmural type has been emphasized strongly.<sup>6</sup> The present data was analyzed because of the clinical impression gathered from personal observation that in our hospital these cases: a) do not follow quite as benign a course as has been reported, b) frequently continue to suffer from coronary artery disease after discharge from the hospital, c) not infrequently succumb from coronary artery disease within a relatively short period of time; all in a manner not as severe yet not so strikingly different from that of the usual transmural infarct.

#### STUDY OF CLINICAL MATERIAL

The records of 29 unselected patients treated for intramural infarction at San Patricio Hospital since 1948 were analyzed. (Table 1). They were all male veterans ranging in age from 34

to 76 years; average 53.5 years. Six of them died while in the hospital for a direct mortality rate of 21%. The average age of these fatal cases was 59.5 years while the average age of 24 survivors was 51.9 years. Six deaths have occurred among the 23 survivors followed for an average of 2 years. (Table 2). Two cases were examined at autopsy only and cannot be included in the clinical study. One of these was dead on arrival at the hospital and the other died suddenly and unexpectedly while undergoing treatment for empyema of the gallbladder in a surgical ward.

Table 1  
AGE INCIDENTS  
29 Cases Studied Clinically  
Limits 34 — 76 yrs.

Decades	No. Cases	Direct Mortality	Survivors
30 — 39	4		4
40 — 49	4		4
50 — 59	10	3	7
60 — 69	10	3	7
70 — 79	1		1
Average	53.5 yrs.	59.5 yrs.	51.9 yrs.

Table 2  
CASE MATERIAL

Diagnosed clinically	— 29	at autopsy	— 2*
Direct mortality	— 6		
Direct mortality rate	— 21%		
Autopsies	— 6		
Survivors	— 23		
Late mortality in Survivors to date	— 6		

\* Clinically suspected at sudden death  
— D.O.A.  
— Surgical ward case with  
empyema gall bladder

All cases admitted to the study conformed to the criteria listed in Table 3. The cardinal symptom was chest pain. In nine



cases there was history of recent onset of angina pectoris of less than six weeks duration which in a matter of days or weeks progressed unusually in severity and lost the typical characteristics of effort precipitation, short duration and rest relief. In seven cases there was a history of well stabilized angina pectoris of over five months duration which likewise increased unusually in severity and lost typical characteristics just before admission. The remaining patients had the classical pain syndrome considered to be typical of myocardial infarction. The diagnosis of intramural or small infarct was made on the basis of evolutive ST-T changes lasting usually for weeks or at least several days and exhibiting configuration and distribution characteristics conforming to the accepted electrocardiographic criteria.<sup>6,9,17</sup> While it is possible that in some cases transmural involvement may occur despite the absence of QRS changes, such absence was the criterion used to accept the case as belonging in the intramural category.

Table 3

## CRITERIA FOR CLINICAL DIAGNOSIS

1. Clinical picture consistent with small intramural myocardial infarction.
  - a) Recent development of angina pectoris with rapid loss of typical characteristics ----- 9 cases
  - b) Established angina pectoris with recent loss of typical characteristics. ----- 7 cases
  - c) Indistinguishable from transmural infarct --- 13 cases
2. Evolutive persistent ST-T changes of certain types without evidence of transmural infarction. ----- all cases
3. Frequent elevation of ESR, WBC, CRP or temperature in "coronary" sequence.
  - a) ESR elev. > 15 — 14 of 23 tested cases
  - b) Temp. elev. > 99 — 11 of 29 tested cases
  - c) WBC elev. > 10,000 — 6 of 26 tested cases
  - d) CRP pos. > 1+ — 3 of 7 tested cases

There was frequent elevation of sedimentation rate, leukocyte count, temperature and abnormal C-reactive protein. Most cases had at least one abnormal result in these tests.

Review of cardiovascular status at admission showed over half the cases with a history of angina pectoris (Table 4). This was associated with mortality in only one case. There were 14 cases with hypertension, four of which died from the attack. Remarkably enough, in seven cases with no hypertension or history of cardiovascular disease three deaths occurred.

Table 4  
CARDIOVASCULAR STATUS AT ADMISSION  
29 Cases Studied Clinically

	Incidence	Relation to Direct Mortality
1. History of angina pectoris		
Stabilized (5 mo. — 11 yrs.)	7	
Recent (2 da. — 6 wks.)	9	1
Total	16	1
2. Hypertension	14	4
3. No hypertension or history of CV disease	7	3
4. History of CHF	4	1
5. History of heart disease, unspecified	3	1
6. Rheumatic heart disease, bivalvular	1	1

Congestive heart failure was the most frequent complication. It occurred in seven cases including the four cases with a history of previous decompensation, and was related to direct mortality thrice. (Table 5). Two patients went on to develop transmural infarct and thromboembolic complications; both died. No patient without complicating transmural infarction developed either pericardial rub, shock, or peripheral embolization.

Table 5  
COMPLICATIONS DURING HOSPITALIZATION  
29 Cases Studied Clinically

	Incidence	Relation to Direct Mortality
CHF, chronic	7	3 (Cases 2, 4, 25)
Thromboembolic	2	2 (Cases 2, 15)
Transmural infarct by EKG	2	2 (Cases 2, 19)
Arrhythmia (A.V. dissociation)	1	1 (Case 26)
Shock	1	1 (Case 19)

Electrocardiographic and autopsy findings in the six fatal cases are shown in Table 6. There was general correlation between electrocardiographic and autopsy localization. In one case with complicating transmural infarct coronary occlusion was found. All other cases showed simply coronary stenosis. Case number 26 had only minimal coronary sclerosis but there was a calcific aortic stenosis which undoubtedly contributed to the coronary insufficiency. Cause of death was congestive heart failure in three cases and pulmonary embolism with shock in one. Two patients died suddenly showing at autopsy subendocardial infarction and coronary stenosis.

Two cases studied only at autopsy are presented in Table 7 in order to illustrate sudden death occurring as the initial and only manifestation of coronary insufficiency. In both there was no history of cardiac disease until the sudden demise. One case showed small midwall and subendocardial infarcts in the left ventricle and the other case simply showed "myocardial ischemia". The coronary arteries showed nothing else than narrowing in both cases.

Study of the 23 survivors followed up for an average of approximately two years discloses several interesting facts. (Table 8). Ten patients remaining asymptomatic were on the average ten years younger than those remaining with congestive heart failure or angina pectoris. Of the five cases remaining with congestive heart failure one developed repeat infarction and two died within an average follow up of 1.9 years. Eleven cases remaining with angina (including three with congestive heart failure) developed eight infarcts subsequently; five transmural and three intramural.



Five in this group have died within an average follow up of 2.7 years. None of the ten asymptomatic survivors have developed either repeat infarct or have died within average follow up of 1.17 years.

Table 6  
D E A T H S  
6 of 29 Cases Studied Clinically

Case No.	Age	EKG Localization	Autopsy Localization	Cause of Death and Other Conditions
2	61	Ant. lat. Subendo. 1 mo. later: Transmural posterior	Occlusion left coronary & massive left ventricular infarct.	HCVD with CHF Inf. mesenteric thrombosis with gangrene Nephrosclerosis
4	57	Lateral Subepi.	Stenosis left cor., desc. branch with small infarct. ant. wall subepicardially	Pulmonary edema. Aortic occlusive atherosclerosis. Nephrosclerosis & uremia with pericarditis.
14	14	High ant. lat. Subendo.	Stenosis Rt. & Lt. Cor. with subendocard. infarct septum and left vent. wall.	Sudden death. Diabetes
16	64	Ant. lat. & diaphragmatic subendo.	Stenosis rt. cor. & left cor., desc. branch with subendocardial & mid wall infarct apex.	Sudden death. Acute CHF Diabetes
19	66	Ant. Subepicardial 20 days later: Transmural anterior	Stenosis Rt. coronary subendocardial infarct posterior septum & apex.	Thrombotic embolism left pulm. artery sec. to phlebothrombosis left femoral & iliac arteries. Shock Left acetabular fracture, old.
26	59	Ant. lateral Subendo.	Minimal coronary sclerosis. Scattered focal, irregular areas of degeneration & fibrosis in left ventricle.	C.H.F., Rheumatic Calcific A.I., A.S. & M.S. Pulmonary sclerosis and Chronic cor pulmonale

Table 7

TWO CASES SUSPECTED AT SUDDEN DEATH AND  
CONFIRMED AT AUTOPSY

Case No.	Age	EKG Localization	Autopsy Localization	Cause of Death and Other Conditions
18	64	D.O.A.	Stenosis left cor. descending & circumflex branches with "myocardial ischemia".	<i>Sudden death.</i> Acute C.H.F.
29	59	Sudden surgical ward death.	Stenosis coronary arteries with subendocardial and midwall infarcts in left ventricle.	<i>Sudden death.</i> Acute C.H.F. Emphysema gall bladder.

Table 8

EVOLUTION OF SURVIVORS  
(23 Patients)

	Number of Patients	Average Onset Age	Subs. Infarct	Late Death	Ave. Length Follow up
CHF	5	59	1	2 (Cases 1, 10)	1.9 yrs.
Angina	11	57	8 (5 transmural (3 " small (Ave. 1.7 yrs.)	5 (Cases 1, 5, 7, 28, 31)	2.7 yrs.
Asymptomatic	10	47.6	0	0	1.17 yrs.
Totals			8	6	

A study of late deaths among survivors is shown in Table 9. Three of them had developed repeat infarct, which happened to be transmural in all, but in only one was the repeat infarct the direct cause of death. The clinical cause of death was congestive heart failure in the majority of these cases; unfortunately, autopsy was performed in only one.

Table 9  
LATE DEATHS  
6 of 23 Survivors

Case	Onset Age	Subsequent Infarct	Death		Autopsy
			Time	Cause	
1	54	4 mo. later (transmural)	2 yrs. later	CHF	Yes
5	54	2 yrs. later (transmural)	6 yrs. later	CHF	No
10	65		2 yrs. later	Pulm Infarct CHF	No
17	57	3 yrs. later (transmural)	3 yrs. later	Transmural infarct	No
25	62	?	2½ yrs. later	Acute CHF Infarct?	No
31	51	?	5 yrs. later	?	Died in N.Y.C.
Averages	57 yrs.		3.4 yrs.		

#### DISCUSSION

Based upon the data that has been presented it may be possible to discuss to some extent the significance of the event of intramural myocardial infarction. However, it must be remembered that this is a small series that carries limited statistical significance and is used here as a basis for discussion of the problems under consideration.

In our experience, the intramural myocardial infarct has been met most frequently in patients with definite evidence of pre-existing cardiac disease. Congestive heart failure and a history of angina pectoris were commonly found in the cardiovascular evaluation at admission. On the other hand, the majority of survivors continued with cardiac disabilities after discharge. Transmural infarction and congestive heart failure emerged as significant factors in the late deaths. In other words, the majority of these patients were well along in the course of their disease when seen during the acute episode caused by coronary insufficiency and continued to experience difficulty after the crisis had subsided. The resulting over all impression created by the sequence of events in most cases of this series is that of a single, continuous, progressive disease. Viewed in this light, episodes of severe coronary insufficiency with intramural myocardial infarction may be interpreted as accidents or phases in the natural history of coronary artery disease. The importance of this interpretation is that it



militates against considering these events as minor episodes of lesser clinical significance and would have considerable bearing on the clinical management.

Along the same line we would recall briefly the four sudden deaths that have been presented. The determination of the true incidence of sudden death in coronary artery disease has been hampered by the fact that minor coronary episodes are frequently cared for at home, perhaps without ever coming to the attention of a physician and may experience sudden death without entering hospital autopsy records. However, studies of sudden death on civilian and particularly on Armed Forces personnel have shown remarkable results. Representative of these is Yater's study of 950 soldiers dead from coronary artery disease of whom 45% died instantly and 60% had no myocardial infarction dying of nothing more than "coronary insufficiency"<sup>10</sup>. It is evident that sudden death is a common form of exodus in coronary artery disease. More important, it is established that sudden death may occur unpredictably with relatively slight coronary narrowing and with little or no myocardial change.

The mechanism of these deaths has been difficult to explain. Brofman et al<sup>11</sup> have recently attributed them to electrical instability caused by oxygen gradient differential at the boundary between ischemic and normally oxygenated myocardium. Such instability is translated clinically into frequently fatal ectopic ventricular rhythms. These investigators have been able to produce this phenomenon experimentally by reducing the blood flow through a single coronary artery of an otherwise well oxygenated heart as well as by perfusing oxygenated blood through a single coronary artery of an otherwise ischemic heart. This is very significant in view of the fact that both the uniformly oxygenated and the uniformly ischemic heart (without an ischemic-oxygenated boundary) are stable electrically according to the authors.

If this mechanism is correct the incidence of sudden death in coronary artery disease should be roughly proportional to the number and severity of ischemic zones in living muscle; i.e.: to the degree of coronary insufficiency and the number of areas affected. It is important to remember that the boundary is produced between **living** ischemic and oxygenated muscle; it would disappear in effect should all the ischemic muscle go on to death. This situation is characteristic in particular of lesser degrees of coronary artery disease but becomes most acute during the early phase of myocardial infarction. It may explain the high incidence of sudden death occurring at this period of crisis.

Two of the most important problems that ensue from the interpretation of episodes of severe coronary insufficiency with in-

tramural myocardial infarction as accidents or phases in the natural course of a single progressive disease are: 1) the prevention of sudden death and, 2) the indications for anticoagulant treatment.

The correction or diminution of the oxygen gradient differential is essential for the prevention of sudden death according to the concept previously described. There seems to be no effective medical methods for eliminating the differential outside of preventing coronary artery disease itself if that be possible, although the prevention and treatment of secondary factors (i. e.: anoxia, blood loss, arrhythmias, heart failure, hyperthyroidism, shock, etc.) in addition to physical rest and coronary vasodilators should be beneficial. Cardiac surgeons are indirectly contributing to solve the problem through their efforts in valvular repair, particularly aortic stenosis. For years several surgical groups have been working on the correction of oxygen differential by revascularization operations.<sup>12,13,14</sup> In essence they are all trying to get blood into the myocardium beyond the point of arterial obstruction. Beck has done his operation in a substantial number of cases<sup>10</sup> but its positive benefit has been questioned.<sup>15</sup> There is urgent need for concerted research effort in order to establish the therapeutic value of this and/or other worthwhile approaches to the problem.

Considerable opinion has been expressed against the use of anticoagulants in intramural myocardial infarction based on the reported absence of mural thrombosis and peripheral embolization.<sup>6</sup> The prevention by anticoagulant treatment of total occlusion of a narrowed artery threatening transmural infarct has been proposed<sup>16</sup> although its actual value is unestablished. While this complication may be infrequent it is a definite possibility that may be very difficult or impossible to predict.<sup>17</sup> It occurred twice in this series. With the hope of preventing total occlusion we have treated nine cases of intramural infarction with anticoagulants during the acute attack (Table 10). In this small group no direct deaths occurred. To our best knowledge, if any selection of cases for anticoagulant treatment was done, it leaned toward treating the worst risks. Nevertheless, this data is not presented in order to claim any statistic significance but merely for the sake of illustration. The group is very small, and the introduction of bias is unavoidable in unplanned studies. Furthermore, review of the fatal cases shows that except for the two patients who developed transmural infarction the deaths most probably would not have been prevented by anticoagulants.

Table 10  
 ANTICOAGULANTS  
 29 Cases Studied Clinically

	No. of Cases	Average Age	Direct Mortality
Treated	9	52	0
Untreated	20	55	6

The tendency for myocardial infarction to recur in survivors remaining with angina after intramural infarct and not in those remaining asymptomatic is of considerable interest though of doubtful statistical significance. However, a similar trend has been reported in long term follow up studies after transmural infarct.<sup>18</sup> Significant reduction of repeat infarct risk in patients treated with long term anticoagulation after transmural infarct has been reported recently.<sup>19</sup> Granted confirmation of this finding our experience would suggest that long term anticoagulation may be indicated after intramural myocardial infarct due to severe coronary insufficiency in patients who remain with angina after the attack. This suggestion is offered for strictly controlled clinical application aimed at further research. At the same time we would like to emphasize that the clinical decision to use anticoagulants in any case depends as much upon the physician's ability, experience, and the facilities he has available, as on the indications or contraindications for such treatment.

SUMMARY

In this series of 29 cases, episodes of severe coronary insufficiency with intramural myocardial infarction occurred most frequently in patients who manifested evidence of pre-existing coronary disease. Most of those who recovered also continued with manifestations of the disease after the episode.

The direct mortality rate was 21%. In half the deaths the direct cause was congestive heart failure. Two cases developed transmural infarction and both died. Sudden death occurred twice in the series and twice as the initial and only manifestation in two cases studied only at autopsy.

In 23 survivors, there were 8 repeat infarcts and 6 deaths (26%) within an average follow up of two years. All repeat infarcts occurred in patients remaining with angina; the deaths in the same group and in those remaining with congestive heart failure. Both groups were on the average 10 years older than those



patients remaining asymptomatic. The most frequent cause of death in the survivors was congestive heart failure.

#### CONCLUSIONS

These observations are not strikingly different from those reported in series of cases with transmural infarction.

Episodes of severe coronary insufficiency with intramural myocardial infarction may be interpreted as accidents or phases in the natural history of coronary artery disease. This interpretation militates against considering them as minor events of lesser clinical significance and has considerable bearing on the problems of therapeutic management.

Two of these problems: the prevention of sudden death and the prevention of thrombotic occlusion are vital research subjects which urgently need definition in terms of clinical application.

It is believed that the data presented warrant the suggestion that cases of severe coronary insufficiency with intramural infarction remaining with angina be considered in the same category as cases of transmural infarction regarding long term management including chronic anticoagulant therapy.

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# HEMOGLOBIN SURVEY IN SAN PATRICIO HOSPITAL\*

## FILTER PAPER ELECTROPHORESIS OF THE HEMOGLOBIN OF 500 PATIENTS

RODRIGO MENÉNDEZ CORRADA, M.D.\*\*

The recognition in 1949<sup>†</sup> that there are abnormalities of human Hemoglobin which concern the globin portion of the molecule has led to the discovery of an entirely new group of diseases and in addition has shed a new light on the nature of sickle-cell disease and thalassemia. Thus, in addition to hemoglobins A and F which were already known to exist, a new series of hemoglobins are now recognized, namely S, C, D, E, G, H, I, J, K and Liberian II<sup>†</sup>. The production of these abnormal hemoglobins is under genetic control and various combinations of them have been found which give rise to different clinical manifestations. These abnormal hemoglobins were discovered by electrophoretic analysis, for this method takes advantage of whatever differences there are between the isoelectric points of the various hemoglobins. The first studies were conducted with the moving boundary method of Tiselius but later on, zone or filter paper electrophoresis proved itself of great value for ordinary diagnostic and survey studies. When filter paper electrophoresis is applied using barbital buffer at PH 8.6 the mobility of the different hemoglobins is found to be as illustrated in figure 1.

With this method then, it is not possible to differentiate very well between hemoglobins I and H or between S and D. The second pair can be differentiated by the lack of solubility of S hemoglobin in the reduced state. Hemoglobin D does not cause sickling which, of course, hemoglobin S does.

Hemoglobin I and H may be separated by the moving boundary technique of Tiselius. In practice, the ordinary six hours run does not separate hemoglobins A and f, these may be more easily differentiated by the alkali denaturation technique of Singer and his associates.<sup>2</sup> This method takes advantage of the resistance to alkali denaturation, a unique property of fetal hemoglobin.

It follows that filter paper electrophoresis has its limitations and is only one of the physico-chemical methods which are employed to characterize hemoglobins. It only happens to be the most convenient one. Investigators practically in all corners of the world are employing these methods to determine the incidence of abnormal hemoglobins and from some of their more recent publications

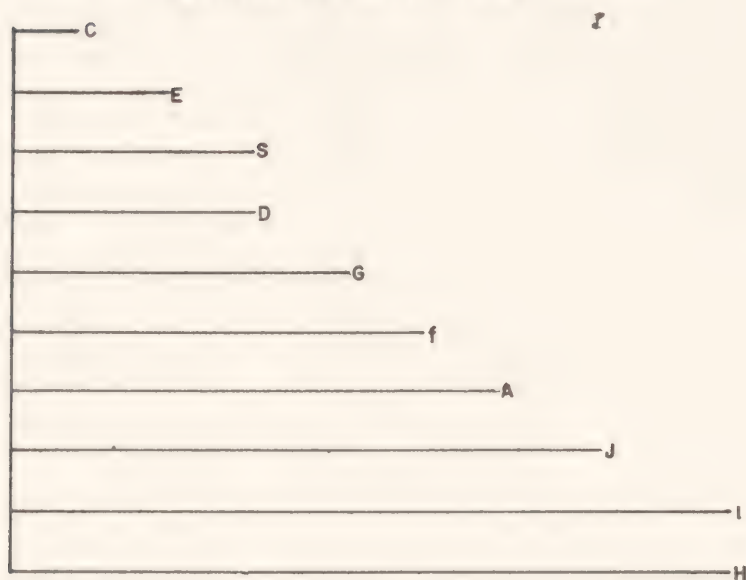
\* Contribution from the General Medical Research Laboratory, San Patricio VA Hospital, San Juan, P. R.

\*\* Ward Physician, Medical Service, San Patricio VA Hospital.

† Liberian I is now considered identical with hemoglobin J.



RELATIVE MOBILITY OF KNOWN HEMOGLOBINS  
BARBITURATE BUFFER PH 8.6



John Battle, Hewlett, Lewis; Cleveland.  
Int. Congress, Hematology, Boston, Mass., Sept. 1956.

we have collected the data which we offer in the next table.  
(Table I)

Table No. 1  
HUMAN HEMOGLOBINS  
Different Types and Geographic Distribution

Type	Date	Frequency	Incidence in the U.S.A.
A	1949	Normal	—
F	1949	Disappears first 7 months of life. Persists occasionally.	—
S	1949	Tropical Africa enclaves in Med. Countries. <sup>6</sup> - New World - India.	Approximately 10% of American Negro.
C	1950	West Africa or wherever slaves from W. A. have been brought.	2 — 3% of Am. Negro <sup>3</sup> . Homozyg. — C 1:6,000 Negros <sup>4</sup> .
D	1951	Reported in all races. <sup>5</sup> Constant feature in Punjabis and Gujarati (India).	0.4% Am. Negro <sup>5</sup> .
E	1954	Above 10% in Thailand and Bur- ma <sup>5</sup> . Also in Indonesia, Ceylon, Bengal.	Rare.
G	1954	Rare	Rare.
H	1955	China <sup>5</sup>	Rare.
I	1955	Rare	Rare.
J	1956	Liberia, Algeria <sup>9,10</sup>	Rare.
Li, II	1956	Liberia	Rare.

The purpose of this paper is to inform the results we have obtained at our survey in the San Patricio Veterans Administration Hospital, San Juan, Puerto Rico. This work was started early in 1955 and thus far we have performed a little over 500 electrophoretic analysis of hemoglobin.

The procedure has been to collect 5 to 10 cc. of blood by venipuncture on each new admission to the hospital; to elaborate each sample into a 5% hemolysate by the method of Drabkin<sup>11</sup> and to submit it to electrophoretic analysis in the apparatus sold commercially under the trade mark of "Spinco" with a direct current of 22 milliamperes for 6 hours using barbital buffer PH 8.6, ionic strength 0.05 and Whatman 3 mm. filter paper strips. At the termination of the 6 hour run, the strips are dried in an oven and inspected for abnormal hemoglobins without dyeing. Specimens that are found to contain any abnormal hemoglobin are subjected to further studies such as the test for sickling with 2% sodium bisulphate, examination of the stained smears for leptocytes and alkali denaturation.

Our initial purpose had been to perform this survey only in the colored patients but we soon changed our minds when we met the difficulty in deciding who was colored or not and the most part of the study has been performed on unselected new admissions.

These then are our findings in the first 500 patients thus studied:

TABLE II

Hemoglobin	No. of Cases
Normal (A)	487
A-S	8
S-S	1
S-C	2
A-C	2
Total number	500

Number of patients with abnormal hemoglobins	— 13
Percentage incidence of abnormal hemoglobins	— 2.6%
Percentage incidence of hemoglobin S	— 2.5%
Percentage incidence of hemoglobin C	— 0.8%

There are approximately 110,000 veterans in Puerto Rico so that this sample represents only 0.45% of the total. On the other hand, new admissions in San Patricio VA Hospital average 1410 annually so that this sample represents roughly one third of their number.

In the following charts we have assembled pertinent data on each of the cases found to have abnormal hemoglobins. (Table III and Fig. 2)

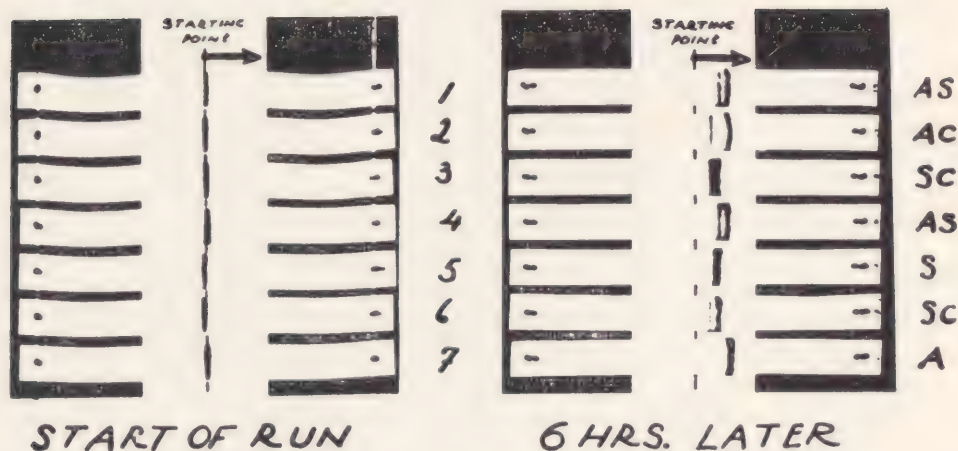
TABLE III

Case	Age	Race	Hemo- globin	Sickling Test	Target Cells	Resistance to Alk. Denat.	Clinical Features of Interest
1. A.G.*	22	Negro	SC	+	++ +	Less than 5%	A 2 yrs. history of illness charac. by bouts of fever, severe aches all over body, lasting 1-2 wks. and remitting with symptomatic treatment. Splenomegaly ± palpable liver, bilirubinemia (I.I. 13.17 u) RBC 3.4 million, mod. neutrophilic leukocytes, Dec. R.B.C. fragility, max. urine concn. (Fishberg) 1015. Hyaline casts. Reticulocyte count 5%.
2. F.T.	26	Negro	AS	+	0		Tuberculous epididymitis. No hemoglobinopathy.
3. H.Z.	22	Very light Mulatto	AS	+			Duodenal ulcer. No hemoglobinopathy.
4. M.S.T.	22	Mulatto	AS	+			Intestinal Schistosomiasis. No hemoglobinopathy.
5. A.F.	20	Negro	AS				Condyloma accuminata. No hemoglobinopathy.
6. G.D.	67	Negro	SC	+	0		This elderly negro was admitted to hosp. for fitting of dentures and does not appear to have had anemia, bone pains or any of the features that go with Hb.C-sickle cell disease.
7. R.C.	33	Mulatto	AS	+	++		Second bout of jaundice in 9 yrs. now associated with hepato and splenomegaly, positive Hanger. No anemia, no leukocytes, inc. alk. phosphatase. Treated as case of inf. hepatitis and recovered completely.
8. H.R.	35	Negro	AC				CA of prostate - clinical diagnosis. No hemoglobinopathy.
9. C.C.L.	26	Negro	AC	—	++ +		Acute appendicitis. No hemoglobinopathy.
10. C.C.	32	Negro	AS	+	0		Paralysis of left arm following brachial plexus injury apparently occurring at cholecystectomy for stones. Recovered.
11. S.C.D.	30	Mulatto	AS	+			Eosinophilic adenoma with acromegaly. No hemoglobinopathy.
12. E.R.D.	37	Mulatto	AS	+		Less than 5%	Severe hypochromic microcytic anemia assoc. with splenomegaly, occult blood in stools and massive uncinariar infestation. Responded rapidly and well to vermifuge and ferrous sulfate. Splenomegaly disappeared.
13. J.L.C.	29	Negro	SS	+	++	Less than 5%	Recurrent episodes of fever, severe pains all over, deep jaundice. Spleen rarely palpable. Anemia. Cholecystectomy for stones, abnormal liver function, bile in urine, etc.

\* This was presented at the meeting of the Puerto Rico Chapter of the American College of Physicians in February 1955 as the first patient in whom the C-variant of sickle-cell disease was recognized in Puerto Rico.



FIG. 2



From this clinical data we can give further support to the already generally recognized fact that, as a rule, no hemoglobinopathy results when one gene for hemoglobin A functions efficiently, that is, the heterozygote for hemoglobin A and any of the other hemoglobins do not suffer from hemoglobinopathy. On the other hand, although not to be inferred from this study, the presence of even a single thalassemia gene will impede the expression of the single gene A and the sickle-cell carrier, for example, who is also heterozygous for the thalassemia gene may suffer from microdropanocytic disease. When no genes for hemoglobin A are present at all, hemoglobinopathies of different severities arise and the combinations S-S, S-C, S-D and C-C are particularly important. It is also pertinent to mention here that although the sickle-cell trait carrier (A-S) will not suffer from hemoglobinopathy, the condition may be deleterious under certain conditions of extreme oxygen deprivation such as occur in high altitudes and under anesthesia. Reports of splenic infarction<sup>12</sup> in these special circumstances are beginning to appear in the medical literature. Hematuria and a deficiency in the ability of the kidneys to concentrate urine<sup>13</sup> seem also to occur with just the sickle trait.

In conclusion, we would like to point out that this is only a progress report on what we intend to develop into a more comprehensive survey. So far we have limited ourselves to the patients of a VA hospital, obviously composed of males of adult age. Excluded from this limited study are the female sex and the young so that our abnormal hemoglobin incidence is not representative of, nor applicable to, the Puerto Rican population in general.

## ACKNOWLEDGEMENT

The author wishes to acknowledge the technical assistance of Dr. Marta Cancio, Mrs. Diana G. Serrano and Mrs. Amina Sala from the General Medical Research Laboratory, San Patricio Veterans Hospital, San Juan, P. R.

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# CARCINOMA OF THE BASE OF THE TONGUE

LUIS A. PASSALACQUA, M.D., F.A.C.S.\*

## INTRODUCTION

This study is based on a group of 36 patients that had carcinoma of the base of the tongue and were treated in the Veterans Administration Center, San Juan, Puerto Rico, during the years 1947 to 1956 inclusive.

The purpose of the study is to inform the survival rate in relation to type of treatment and pathological differentiation group.

The 36 patients are divided into three groups from the point of view of treatment; 11 patients received irradiation alone; 4 patients were treated surgically only; and 21 patients had surgery and irradiation.

## INCIDENCE

### I

According to statistics available to me at this time, cancer of the tongue in Puerto Rico is three and one half ( $3\frac{1}{2}$ ) more frequent than in the Continental United States.

If we take the year 1954 as an example we have that the total number of cancer patients that were reported to the Health Authorities of the Commonwealth of Puerto Rico was 2547.

In only 57 instances was the tongue mentioned as the location of the cancer, or 2.8 per cent of the total number of cases, but that same year, the percentage in the Continental United States was 0.8.

Between the years 1954 to 1956 inclusive, 153 patients with cancer of the tongue were reported in Puerto Rico. Of these, 45 were females and 108 were males. The base of the tongue was mentioned as the site of the cancer in 69 instances. In this latter group there were 49 males and 20 females.

### II

In the Veterans Administration Center at San Juan, Puerto Rico, 68 male patients were found to have cancer of the oral cavity during the years 1947 to 1956 inclusive. Carcinoma of the base

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The statements and conclusions published by the author are the result of this own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

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SQUAMOUS CELL CARCINOMA OF THE BASE OF THE TONGUE  
Metastasis following radiotherapy.

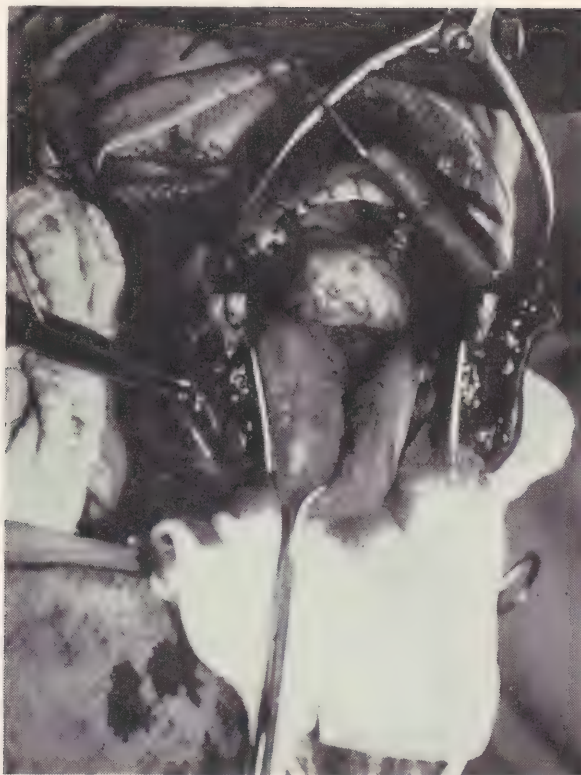
of the tongue was found in 36 patients. Among the other 32 patients, 10 had the cancer located in the anterior portion of the tongue and 22 in other locations such as pyriform sinus, hypopharynx and tonsils.

The oldest patient in this series found to have carcinoma was in his 78th year of age, and the youngest was 49 years old; 4 patients were between the ages of 70 and 79; 24 between 60 and 69 and six between 50 and 59. Sixty seven percent (67%) of the patients were in their sixth decade of life.

**Comment on Incidence:** According to Martin (1940) 33 per cent of all cancers of the tongue occur in the base of the tongue. In our group, 72 per cent were located at the base. The whole statistics for Puerto Rico reveals that 45 per cent of the cancers of the tongue are located at the base.

Why cancer of the tongue in Puerto Rico is more frequent,  $3\frac{1}{2}$  times, than in other areas of the United States is not clear.

The proportion of cancer of the base to that of the movable anterior portion in the veterans group here studied is 36 to 10, or



RHABDOMYOSARCOMA OF THE BASE OF THE TONGUE  
Appearance of the tumor at operation.

nearly 76 per cent, which is the opposite to the percentage reported by Martin.

#### ETIOLOGY

The study of these cases do not offer any light on the etiology of cancer of the base of the tongue. Neither it explains why it should be so much more frequent in Puerto Rico than in the United States.

The study of the habits of these individuals reveals the use of tobacco in considerable amounts and also of hot drinks, specially hot coffee and soup. Alcohol has been used in moderate amounts by the majority of these patients and some have been abstainers.

They have had an average incidence of respiratory infections and the large majority poor dentures and poor oral hygiene.

The economical status of all the patients has been critical. Most are indigents and all are poor. The great majority was unable to consume the proper food and were subject to nutritional deficiencies. These conditions place these patients in a special group.



RHABDOMYOSARCOMA OF THE BASE OF THE TONGUE  
Appearance of tumor after removal.

#### PATHOLOGY

##### I

In our series of 36 cases, squamous cell carcinoma was diagnosed microscopically in 35 patients and in one patient the tumor was a huge rhabdomyosarcoma. This last patient had the tumor four years before he came to our hospital for examination. It is possible that the tumor was not malignant from the onset, but underwent malignant changes at a later date, since the patient claims that it was not until the last few months that he noticed that it was growing more rapidly.

##### II

The majority of these tumors were well differentiated. The number of tumors that were classified into the group types I and II was 19, which constitutes 53 per cent of all the tumors of the base of the tongue. Only 9 cases were reported as grade III and IV, or 23 per cent. In 3 cases the pathologist did not inform the degree of differentiation.

The 5 last cases were informed by the pathologist that there were in the same tumor areas of high differentiation and undifferentiated areas in more or less equal proportions throughout the tumor.

The last 5 cases were informed by the pathologist as containing, in more or less equal proportions throughout, areas of high differentiation and areas anaplastic and poorly differentiated.

**Comment:** Malignant epitheloid tumors of the base of the tongue are of endodermal origin. They are supposed to possess a



high degree of malignancy and are undifferentiated and anaplastic. Keratinization, unlike other tumors of the tongue of ectodermal origin, is very rare. The anaplasticity of the tumor renders them very susceptible to the action of radioactive agents.

In our series, the situation is quite different since the great majority of the tumors are of the more differentiated variety and, therefore, their radiosensitivity is of very much less degree.

## METASTASIS

### I

Of the total series of 36 patients, 18 are alive at the time of this report, November 30, 1956. Of these 18 living patients, only 4 did not have palpable metastasis of the cervical lymph nodes at the time of the first examination. Unilateral metastasis was found in 13 patients. One patient had bilateral metastases.

There is one patient alive today, 6 years and 2 months after treatment was instituted. Radon seeds were implanted in the original tumor. No metastases were present. Several months later the patient reported and it was found that the original lesion had recurred and that there were palpable glands in both sides of the neck. The base of the tongue was resected followed by bilateral block resection, April 1, 1952. The primary lesion was grade III and the metastatic gland was also grade III.

Another patient who is alive today, 5 years and 1 month after the primary treatment, developed a single pulmonary metastasis and lobectomy was performed in October 29, 1953. Last x-ray study of the lung was done here in October 19, 1956 with negative findings. He is free from other recognizable metastasis or recurrency.

### III

There are 18 patients that are dead at this time. Two patients did not have palpable metastatic nodes at the time of their first examination, 14 patients had unilateral metastasis and two patients had bilateral metastases.

The two patients without palpable metastasis died in less than one year after the original treatment. The unilateral group that consisted of 14 patients had 10 fatalities during the first year (77 per cent) while one patient lived two years, two patients lived 3 years and one patient lived 5 years 1 month. The two patients with bilateral metastases lived also less than one year.

We have not been able to locate one of these patients operated in 1948 and because of the description of the original lesion we believe that he has died of cancer in less than 1 year.

## IV

The patient in this group who survived 5 years and 1 month had to have a lobectomy in March 14, 1955 for a single metastasis of the lung. He died one year and 5 months later, August 9, 1956, of generalized metastasis.

## V

Considering all patients studied (36) we have that 7 did not have palpable metastasis during their first examination, 27 had unilateral metastasis and 3 had bilateral metastasis.

Two of the three patients with bilateral metastasis died during the first year, and one is still alive one year after diagnosis. Of the six patients that did not have palpable metastasis at their first examination, 2 died during the first year, 3 are alive at the end of their first year, and one is alive at the end of his second year.

Unilateral metastasis was palpated in 27 patients and 14 are dead (51%). The average life span in this group is 1 year 8 months. We have to make allowance to the fact that 13 patients of this group are still alive.

## VI

Of the 36 patients 13 died during the first year, (36%). This constitutes the greatest number of deaths in one period of time. One died during his second year, two during the third year and one during his sixth year.

On the other hand, 3 patients lived more than five years, (8.4%), and two of them are still living and free from recurrence or metastasis. There is an over 6 year survival of 5.6 per cent.

## DIAGNOSIS

The diagnosis in all these patients was made by the history, physical findings, direct laryngoscopy and tissue examination by the pathologist.

In three individuals in which direct laryngoscopy and visual study by the otorrhinolaryngologist was negative digital palpation suggested changes in the consistence of the tissues sufficient to make the area suspicious of some abnormality. This was specially important because the diagnosis of metastatic epitheloid carcinoma of the cervical glands was made previously by biopsy.

## DIFFERENTIAL DIAGNOSIS

These patients did not have any systemic disease, such as syphilis and tuberculosis, that could be mistaken for carcinoma. The

presence of a lesion in the base of the tongue with a granulating surface that bleeds easily with induration of the surrounding tissue, is carcinoma. Syphilis in that area is less than one per cent as frequent as carcinoma. Tuberculosis is very rare and it forms a painful tender ulceration without induration. Carcinoma of the base of the tongue is not painful until the later stages.

Leukoplakias may look like carcinoma, and there is likely to be certain confusion. They may be ulcerated or fissured. They are not indurated. Many times carcinoma will be diagnosed by the discovery of an indurated area.

Simple granulomas are usually of traumatic origin or as sequelae to Vincent's Angina. It heals within two weeks if properly treated. In general, it can be said that any lesion of the base of the tongue, and this goes as well to any lesion in the oral cavity, which does not heal at the end of the two weeks of proper treatment, should be considered carcinomatous unless proven otherwise by biopsy.

There are other benign tumors of the tongue that should offer little difficulty because of their characteristics. These are: benign papillomata of the tongue, fibromas, hemangiomas, glos-sitis rhombica mediana. They do not have the cauliflower appearance of carcinoma whose surface bleeds easily.

Fissured ulcers. These ulcers have tissue piled up along the edges with overhanging margins, bleed easily, and may be sloughing, painful and solid, presenting ulcerations. They are located along the edge of molar area or as a solid mass in the center of the tongue and may extend to the floor of the mouth over alveolus, tonsillar pillars, epiglottis and pharynx. Unlike carcinoma, these lesions respond quickly to proper treatment.

Back of the tongue is a silent area. There may be no pain until development is extensive or the tumor might be discovered after the metastasis to the cervical lymph nodes is present. In the presence of cervical lymph node metastasis a careful examination of the oral cavity, specially the base of the tongue, should be done.

#### YEARS SURVIVAL AFTER BIOPSY

##### I

Three patients in which biopsy was done no grade was mentioned by the pathologist. One of these patients lived less than one year. Two of them are alive today, one of them 1 year, and the other 2 years. Two patients had grade 1 carcinomas and both are dead, one 1 year and one 3 years after biopsy.

Four patients were classified between grade I and II of malignancy. Three are alive today, one 1 year, one 2 years and one 3 years.



Grade II comprised the largest group. There were 13 in this group. One is alive 5 years and 6 months. One is alive 3 years. Three 2 years, one 1 year. One died 3 years and two died 1 year after diagnosis.

This group of patients had well differentiated tumors. All of them were treated by radiation, by surgery or a combination of both. At present 13 are alive with an average survival so far of two years. One is well beyond a fifth year without evidence of recurrence.

## II

There were 5 patients in which the areas of differentiation and undifferentiation were about the same. This group was classified grade II to III. One of these patients is alive today, 6 years 2 months after biopsy. Three were dead by the end of the first year and one is alive one year after biopsy.

## III

The undifferentiated group consists of 4 patients classified as grade III, 2 patients classified as grade III to IV and 3 patients with completely anaplastic tumors classified as grade IV, a total of 9 patients.

Only one patient alive 2 years today. One of these undifferentiated tumor patients lived 5 years and 2 months after diagnosis; one 3 years 10 months; two 3 years and three only one year. The average length of time survival was 2 years 8 months.

## IV

The 3 patients that lived more than 5 years, 8.4 per cent of the total number of patients studied, belonged to the medium groups of differentiation. One was grade II, one grade II - III and one grade III. Two patients are still alive over five and six years since the diagnosis was made.

The average survival in years in both the well differentiated and the undifferentiated group is practically about the same.

## TREATMENT

### I

Eleven patients received radiation alone. Six patients died during the first year following radiotherapy, a first year mortality of 55 per cent. One patient died in the second year making a total mortality of 63 per cent during the first 2 years. Only four patients are still alive. All of them received treatment less than one year ago.

## II

Surgery alone was instituted in four cases. One of the patients had refused radiotherapy. Three of these patients are still alive two years after the operation. The fourth one died in his second year.

## III

Radiation was followed by surgery in 5 patients. One patient lived 3 years. The other four patients are still living: two, a year after treatment; one, 2 years after treatment; and one, 6 years after treatment. This last patient is well today and had lobectomy for solitary pulmonary metastasis October 29, 1953, 2 years ago. The average life span today is 2 years and 7 months but this will be greatly improved with time since four of the five patients are still alive.

Primary surgery removing the primary lesion and cervical metastasis in one operation, was followed by radiation in 12 patients. Seven patients are still living. Two patients are in their first post-treatment year; two in their third; and one in his sixth year.

Five patients died. One lived 1 year, one lived 2 years, one lived 3 years, one lived four years and one lived 6 years. This last patient had a lobectomy performed for a solitary metastasis of the lung, March 14, 1955, one year and five months before his death August 9, 1956.

Average life span including those alive today is 2 years and 10 months.

## DISCUSSION

This is obviously a small series, but the demonstrable evidence is not much different from that of other reports of the literature. It confirms the claim that the treatment of carcinoma of the base of the tongue is a combined effort between the radiotherapist and the surgeon. It does not appear to be of much importance who treats the lesion first, if the surgeon or the radiotherapist. The important point is to select the case and, whoever should do the first treatment, to do it thoroughly. The patients in which both methods of treatment have been used were carefully selected for each procedure. If the lesion was well differentiated and not too extensive, a one stage resection was made of the primary lesion plus block dissection of the cervical lymph nodes, and this was followed soon after a full course of radiation. If the lesion was highly undifferentiated and extensive, the procedure was reverse,

# <sup>1</sup>EXPERIENCES WITH PREDNISOLONE

JULIO V.<sup>1</sup>RIVERA, M.D.\*

Several synthetic compounds have been introduced in the search for a cortisone analogue that will combine maximal clinical effectiveness and minimal toxicity. Among these is prednisolone (Deltacortril, Pfizer). Preliminary studies<sup>1</sup> with this compound appeared to show it to be several times more potent as an anti-phlogistic agent than cortisone. Sodium and water retention, potassium loss and diminished carbohydrate tolerance appeared to be less prominent during its administration. The compound was, however, not incapable of producing serious side effects such as the production of peptic ulcer and mental derangements.<sup>2</sup>

Prednisolone became available to us for clinical use late in 1955.\*\* This is a report of our experience in the first fifty cases treated with this compound at San Patricio Veterans Administration Hospital.

## MATERIAL AND METHODS

Consecutive hospitalized patients in whom there appeared to be an indication for the use of corticoids were treated. Although the dose of the drug was individualized according to the patient's needs, initially it was usually in the range of 20-40 mgm. daily. As soon as definite improvement was apparent, the dose was gradually reduced. In most cases treatment was continued for only two to three weeks. All patients were observed closely for the development of untoward reactions such as gastrointestinal symptoms, glycosuria, hypertension or undue weight gain. Patients requiring maintenance dosage were examined frequently during visits to the hospital or to the Regional Office.

## RESULTS AND COMMENTS

Table I summarize the results obtained in the various conditions treated. They are classified as good, poor and questionable. Results were considered questionable when improvement was either slow to occur or could possibly be attributed to other therapeutic measures which were employed concomitantly with prednisolone.

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\* From Medical Service, San Patricio Veterans Administration Hospital, San Juan, Puerto Rico.

\*\* Kindly supplied by Charles Pfizer & Co., Inc., San Juan, Puerto Rico.



TABLE I — RESULTS

	Improved	Questionable	Not Improved
Asthma and status asthmaticus	7	3	
Urticaria, serum sickness	4	1	
Dermatoses	6	1	1
Allergic vascular diseases	2		1
Rheumatoid arthritis	6		
Bursitis, tenosynovitis	4	1	
Synovitis, chronic		1	
Polyarthritis, unclassified	1		
Lymphoma, multiple myeloma	2	2	1
Thyroiditis	1		
Ulcerative colitis		1	
Amyloidosis, primary		1	
Bell's palsy			1
Myeloradiculitis	1		
Pyelonephritis			1

#### **Asthma and status asthmaticus:**

Most of these patients were admitted to the hospital after they had received treatment without improvement at home or at a transferring hospital with the usual symptomatic medications. Upon arrival various measures were usually tried for one or more days before we resorted to the use of prednisolone. In these refractory cases the effect of the drug was frequently dramatic, improvement occurring overnight or in the course of two or three days.

#### **Urticaria and serum sickness:**

Serum sickness and urticarial reactions, most of them due to penicillin, responded regularly to treatment. The single exceptions was a chronic case of urticaria complicated by multiple factors, including psychiatric ones.

In both these groups high initial doses could be cut down rapidly with only an occasional recurrence of symptoms. Asthmatic patients became again responsive to aminophylline and other medications so that they could continue self treatment at home. A maintenance dose of prednisolone was occasionally needed for prolonged periods to prevent recurrence.

#### **Dermatoses, including contact, allergic and neurodermatitis:**

All of these patients showed acute skin reactions with fissuring, erythema, exudation and pruritus. Some of them were recent and directly related to contact with a local irritant or allergen. Others were superimposed on chronic dermatoses, such as

neurodermatitis. Local self medication was frequently the cause of exacerbation or generalization of a chronic process.

Here again, marked improvement within one day was the rule. Such rapid improvement was not observed when only the usual local dermatological treatment was given. Generalized psoriasis in the patient with psoriatic arthritis did not improve under treatment.

### **Allergic vascular disease:**

A patient with allergic angiitis manifested mainly by an erythematopurpuric eruption, arthralgias and fever responded fairly well with the production of a remission. Prolonged maintenance treatment with 10 to 15 mgm. daily was required. Ten months after onset we were able to discontinue the drug without recurrence.

Another case of diffuse vascular disease (possible periarteritis nodosa) with severe cardiac and renal lesions did not tolerate the drug (see below).

A case of periarteritis nodosa showed an excellent initial response (See case No. 2).

### **Rheumatoid arthritis:**

All included cases of rheumatoid arthritis showed generalized active disease of fairly recent onset. Response to treatment was usually good but frequently remission was incomplete and at times slow to be attained with residual joint stiffness and synovial thickening. High dosages (60 mgm. daily) were required in two patients to produce significant improvement. The dose could be reduced in a few weeks in all, but maintenance medication was required in all but two patients. Concomitant treatment with acetyl salicylic acid at times produced added relief. With the use of prednisolone these patients became better subjects for physiotherapy and rehabilitation.

### **Bursitis, tenosynovitis:**

Acute conditions such as bursitis and tenosynovitis of the shoulders responded more promptly than rheumatoid arthritis and the results were usually lasting after a very brief course of treatment.

### Lymphomas, leukemia, multiple myeloma:

Prednisolone was found occasionally useful as adjunct treatment in several cases of diffuse lymphomas and myeloma. It produced at times remission of fever and systemic manifestations and relief of bone pains. It was usually used when bone marrow depression precluded the use of other chemotherapeutic agents. The beneficial results were usually short lived.

### Miscellaneous:

A case of acute thyroiditis responded promptly to treatment. One case of ulcerative colitis slowly improved under a full therapeutic regime which included prednisolone.

A patient with primary amyloidosis presenting a clinical picture of renal failure improved temporarily. It is not certain if prednisolone was responsible since other measures were employed concomitantly.

No improvement whatsoever was noted in one patient with peripheral facial nerve palsy (Bell's) treated starting on the eighth day of the disease.

A case of acute myeloradiculitis of undetermined etiology seemed to be benefitted by treatment with prednisolone.

TABLE II — UNTOWARD EFFECTS

	Number of Patients
Peptic ulceration	3
Fluid retention	2
Acneiform eruption, severe	3
Mooning of face, marked	2
Insomnia, restlessness	1
Diabetes	1

### UNTOWARD EFFECTS

Table II summarizes the important side effects which were observed. Minor changes such as transient acneiform eruptions and slight rounding of face have not been tabulated.

Peptic ulceration was the most common serious complication of treatment. One elderly patient being treated (60 mgm. daily dose) for multiple plasmocytomas and with a previous history of duodenal ulcer developed a recurrence which eventually required surgical treatment. Strict medical treatment while on drug did



not control him. Following subtotal gastrectomy he tolerated prednisolone well. One other patient who had shown antritis on x-ray examination soon after arrival, developed duodenal ulcer after 13 days (40 mgm. daily) treatment. Acute gastric bleeding was the immediate cause of death in a patient who was being treated with a tentative histological diagnosis (AFIP) of lymphoma. He received prednisolone 30 mgm. daily for 34 days. Autopsy revealed adenocarcinoma of the thyroid and acute gastric ulcers. Several other patients complained of transient ulcer-like symptoms but a diagnosis of ulcer could not be established on roentgen examination.

Water and sodium retention definitely occurred in two patients. One of these was in congestive heart failure which was aggravated during a six day course when a total of 80 mgm. of prednisolone was given. He became unresponsive to mercurial diuretics. Another patient with chronic pyelonephritis and hyperpotassemia received the drug for four days. An exacerbation of heart failure with pulmonary edema and death followed.

Insomnia and restlessness were attributed in one patient to prednisolone. Marked rounding of the face was noted in two patients. A moderately severe acneiform eruption occurred in three.

None of these patients developed infections which could be directly related to the drug. Bronchial infection which was present in several patients with status asthmaticus responded well to treatment with antibiotics.

The following two cases are summarized because of the occurrence of somewhat unusual complications during treatment:

### Case 1.

A diagnosis of rheumatoid arthritis was made on this 23 year old male in October 1955. At that time he was found to be undernourished, febrile and chronically ill. There was generalized inflammatory joint diseases involving especially the hands, knees and ankles. Slight hepatomegaly was found.

Laboratory examinations revealed a slight hypochromic anemia, hyperglobulinemia, elevated erythrocyte sedimentation rate and positive C-reactive protein. Antistreptolysin titer was normal and L. E. preparations were negative. Several urinalysis showed no abnormalities.

Under treatment with prednisolone, 40 mgm. daily at first and later 20 mgm. daily, there occurred moderate improvement. He was discharged on this maintenance dose.

Following a respiratory infection, he was readmitted on Fe-

bruary 1956 with a febrile exacerbation of the joint disease. Physical and laboratory examinations were similar to those during previous admission. Under treatment with penicillin and prednisolone, 40 mgm. daily, he again improved. Because relief of joint pain was incomplete, aspirin was added to the therapeutic regime with good result. He was discharged March 5, 1956 on a maintenance dose of both drugs.

On April 26, 1956 he was readmitted because of a two-week history of pyrosis, and excessive thirst and increased urine output. The week before admission he also developed watery diarrhea, fever and periumbilical pain.

Examination revealed, in addition to the previous findings, signs of dehydration.

Urinalysis revealed marked glycosuria. Blood glucose was 774 mgm/100 mg CO<sub>2</sub> combining power 24 m.Eq./L.

The acute gastrointestinal symptoms promptly subsided. Prednisolone, 40 mgm. daily, was continued. Regular insulin, 100 units daily were required for control of diabetes. NPH insulin (70 u. daily) was later substituted. Dose of prednisolone was gradually decreased to 15 mgm. daily. When this dosage level was reached, patient started having hypoglycemic reactions. The dose of insulin was rapidly decreased without recurrence of glycosuria or hyperglycemia. Glucose tolerance test on July 11 revealed a diabetic curve. He was discharged in partial remission of arthritis on a maintenance dose of prednisolone of 15 mgm. daily.

**Comment:** Although he had not previously manifested symptoms of diabetes or glycosuria and no family history of the disease could be obtained, it is presumed that this man had latent diabetes. The overt disturbance of carbohydrate metabolism was precipitated by prolonged moderate dosage of prednisolone.

## Case 2.

This 39 year old man was first admitted April 1, 1955 with a three month history of asthenia, calf pains, fever and shifting upper abdominal pain. Physical examination revealed a well nourished man not acutely ill. Temperature was 98.8° F., pulse 80, blood pressure 160/110. Lungs were clear. Soft apical and aortic murmurs were present in a normal sized heart. The liver was 2 cm. below the costal margin and tender. The spleen was questionably enlarged. The left calf presented tenderness without swelling and a firm cord medially was thought to represent a thrombosed vein.

Laboratory examinations: RBC 3,490,000/cu.mm.; hemoglobin 11.4, WBC 5,500. Neutrophils 66, lymphocytes 32, monocytes 5.7%.



B.S.P. 4% retention in 45 min. Serum bilirubin 0.47 mgm. Cephalin flocculation 1+. Urinalysis and stool examinations negative. ECG was borderline with possible left ventricular hypertrophy.

Calf pain and irregular fever persisted and on April 27 two tender subcutaneous nodules appeared on the arms and trapezius. Biopsy revealed periarteritis nodosa. Treatment with cortisone (100 mgm. daily), prednisone (20 mgm. daily) and later prednisolone (5-10 mgm. daily) resulted in remission of all symptomatology. He was discharged on maintenance dose of prednisolone and remained asymptomatic until November 4. On that date there suddenly appeared epigastric pain, vomiting, high fever and diarrhea. He entered another hospital where, in the course of a few days he developed massive ascites. He was transferred to this hospital on November 21, 1956.

Examination revealed a chronically ill, pale man in some respiratory distress. Temperature was 100°F, pulse was 90 per minute and blood pressure was 150/110. Retinae were normal. Moist basal rales were heard. Diaphragm was elevated. Heart was displaced to the left but otherwise normal. Edema of abdominal and lower chest wall and marked ascites were noted. Calves were tender and slight leg edema was present.

Laboratory examination: RBC 4,590,000 cu.mm.; hemoglobin 11.9 gm.; WBC 5,000; 60% neutrophils, 35 lymphocytes, 2 monocytes; 3% eosinophils. Urinalysis: specific gravity, 1.014; 2+ albumin; sediment; many RBC, 10 to 16 WBC and many hyaline and granular casts. Serum bilirubin, 0.5 mgm. B.S.P. test showed 12% retention in 45 minutes. Serum amylase was 141 units. Serum albumin, 2.1; globulin, 4.5 gm.; cephalin flocculation, 4+. Urine urobilinogen, 0.7 Ehrlich units in 2 hours; NPN, 31.8.

Chest x-ray: heart somewhat enlarged. G.I. series: negative. Esophagogram: varices of lower portion. Venous pressure (arm): 13 cm. of water.

Course: Paracentesis yielded light yellow fluid with 0.2 gm. protein L with a specific gravity of 1.009. There were no organisms on culture and no tumor cells on smear. Following paracentesis a tender firm liver was felt. Splenomegaly (moderate) was also found. He continued with a low grade fever and some muscular aching but ascites did not reappear. He was discharged December 31, 1956 on aspirin.

**Comment:** The renal and severe hepatic disease in this patient were interpreted as probably due to periarteritis nodosa. There was some indication of their presence (tender hepatomegaly, hypertension) during the first admission. Treatment with prednisolone did not prevent progression of these lesions. It is possible that healing of vascular lesions during therapy may have



aggravated the parenchymal lesions by producing multiple infarction. This course of events has been seen in other cases treated with corticoids, especially when renal lesions were present.

#### SUMMARY

Experiences in the treatment with prednisolone of 50 patients with a variety of conditions have been presented. Although the number of cases is small our preliminary impression is that this drug is especially useful in the treatment of refractory cases of asthma, acute inflammatory reactions of the skin and in rheumatoid arthritis. Although infrequent, serious side effects, such as peptic ulcerations, fluid retention and impaired glucose tolerance do occur.

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## "PROPER SITTING"

HERMAN J. FLAX, M.D., M.Sc. (Med)\*

Fatigue and back-ache in executives and office personnel are caused, usually, by poor sitting posture. Another important factor is the failure to strengthen the extensor muscles of the trunk with proper exercises during the advancing years. This paper will summarize only the investigation in correct sitting and leave the exercise program for another presentation.

Correct sitting posture<sup>1,2</sup> means sitting well back into the chair and placing the body weight upon the tuberosities of the ischia and not on the end of the spine or the coccyx.

The body should be erect, the head up and eyes inclined toward the desk. At times, it may be necessary that the body be brought closer to the desk. This may be done by keeping the body straight, pivoting forward at the hip joints and not by buckling the body at the abdominal line. The shoulders, arms, and forearms must be free to move in all normal directions. The thighs are brought to almost a right angle with the torso at the hip joints, and the legs to practically a right angle with the thighs at the knees. The feet should rest comfortably on the floor, and they, not the front edge of the seat, should support the weight of the lower extremities. The thighs, therefore, act as balancers to help maintain erect posture and not support the body weight.

Undue strain on the back muscles, ending in fatigue and backache, can be avoided if the body is held in this position. However, it is hardly possible to keep the body in this posture all day long without support. This emphasizes the need for proper chairs.

The chair, whether of wood, metal or a combination of the two, is of no importance from the standpoint of posture. Whether cushioned or of wood is also immaterial. The selection is influenced by the length of time the occupant will sit in the chair. All metal seats, unless cushioned, have some objection.

There are two types of posture chairs available; those with set posture features and those the manufacturer claims to be fully and completely adjustable. Chairs that are built without adjustable features but incorporate the consideration of correct sitting are suitable for the vast majority of persons. Once in a while, a person is seen who is so out of proportion to the average that

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such a chair is not suitable. In this instance, an adjustable chair would be preferable.

A height of  $17\frac{1}{2}$  inches from the floor to the seat will be found to satisfy 95 per cent of all persons. There may be a variance of  $\frac{1}{2}$  inch, more or less, without making any practical difference. If the seat is padded, the height from floor to top of padding should be  $18\frac{1}{2}$  inches, since the cushion is compressed by the person's weight.

The seat should have a drop of practically one inch from front to back edge to encourage the occupant to sit well back into the chair. The depth of the seat should allow the feet to support the legs free from pressure of the front edge against the popliteal space, permitting normal circulation to the lower extremities. An interference in circulation will cause the legs to feel numb or "go to sleep" in extreme cases.

The arms rests should permit free movements of the upper extremities to ensure complete relaxation. The arms should be able to hang, so that the elbows will not touch the arm of the chair when sitting upright in correct position. Also the arms should not interfere with free movement of the occupant to either side.

The back of the chair should not encroach upon the lower angles of the scapulae, nor should it reach the rear edge of the seat. The lower crossbar of the back should be fixed several inches above the level of the seat and curved to adjust to the contours of the body. This allows the buttocks to protrude over the rear of the seat and eliminates pressure upon the coccyx.

The curve in the lumbar region, or lower back, is subject to much variation if the pelvic tilt is permitted to be either accentuated or decreased. Since fatigue and pain first become manifest in this area and then spread to other regions of the back, it is here that solid support must be given. Hence, the back of the chair should have a support that fits firmly into the lumbar curve of the spinal column.

These are the essentials of a "proper sitting" chair. Such a chair compels the occupant to sit straight and corrects and prevents poor posture and backache. This means greater comfort, better health and less fatigue for the employee; and for the employer, greater efficiency, less loss of time and increased financial return.

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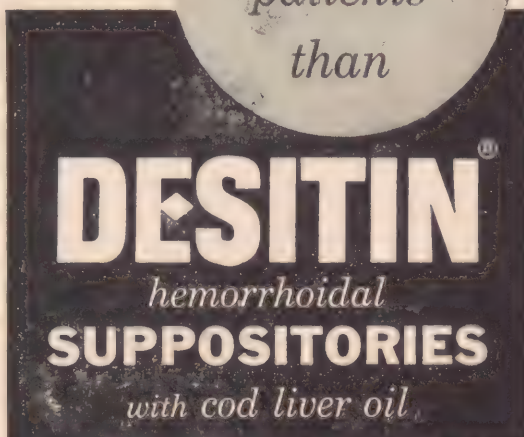
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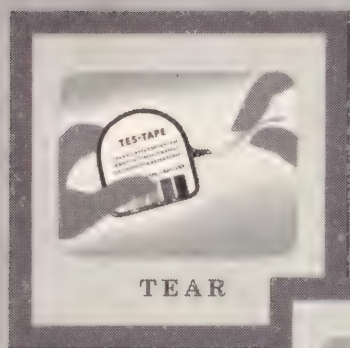
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# BOLETIN

DE LA

## ASOCIACION MEDICA DE PUERTO RICO

VOL. 49

AGOSTO, 1957

No. 8

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Roberto Busó, M.D., Luis Vallecillo, M.D. and Víctor Marcial,  
Santurce, P. R.*

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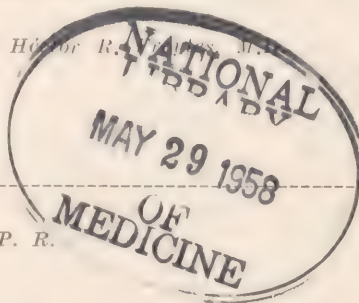
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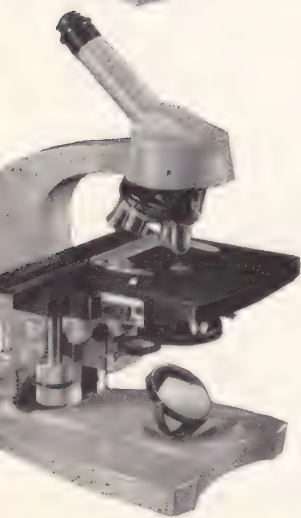
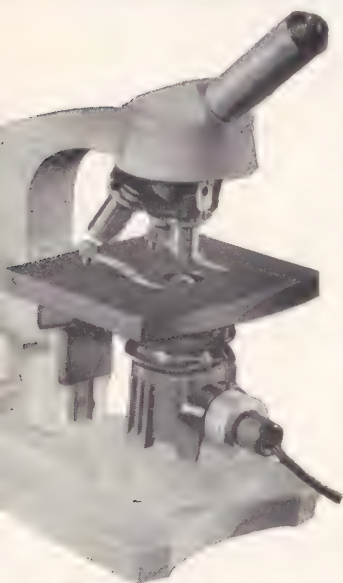
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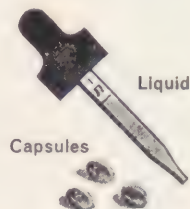
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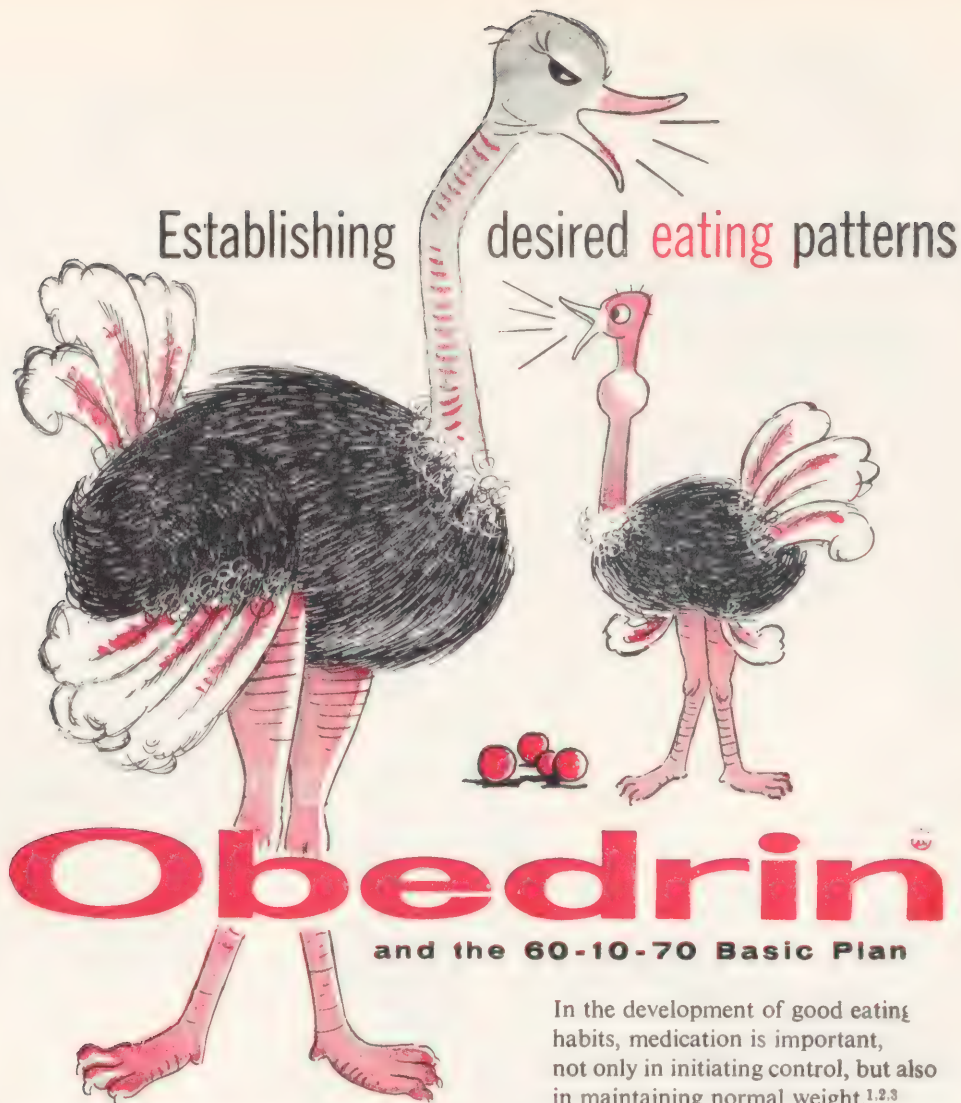
(1) Wilson, J. L., and Dickinson, D. G.: J. A. M. A. 158: 261, 1955.



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1. Eisfelder, H.W.: *Am. Pract. & Dig. Treat.*, 5:778 (Oct.) 1954).

2. Sebrell, W.H., Jr.: *J.A.M.A.*, 152:42 (May, 1953).


3. Sherman, R.J.: *Medical Times*, 82:107 (Feb., 1954).

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*Literature and Samples on Request*

<sup>1</sup>Feinblatt, T.M., Feinblatt, H.M., and Ferguson, E.A.: Rauwolfia-Ephedrine, As a Hypotensive-Tranquilizer. J.A.M.A. 161:424 (June 2, 1956).

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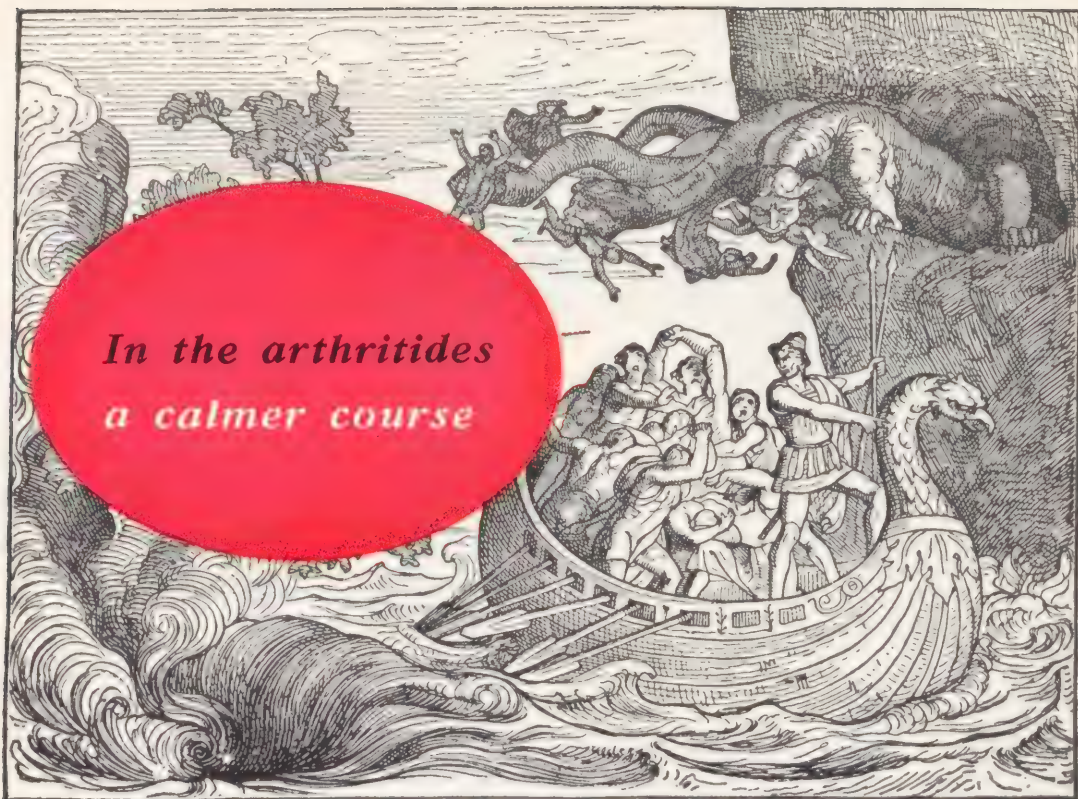
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<sup>1</sup>Busse, E.A.: Treatment of Rheumatoid Arthritis by a Combination of Cortisone and Salicylates. *Clinical Med.* 11:1105

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<sup>†</sup>Welch, H.: From “Opening Remarks”, presented at Fourth Antibiotic Symposium, October 17-19, 1956, Washington, D.C., U.S.A.

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## **ansiedad...tensión física y mental**

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*RAUL A. MARCIAL-ROJAS, M.D.<sup>1</sup>; AGUSTIN M. DE ANDINO JR., M.D.<sup>2</sup>;  
ROBERTO BUSO, M.D.<sup>3</sup>; LUIS VALLECILLO, M.D.<sup>4</sup> and  
VICTOR MARCIAL, M.D.<sup>5</sup>*

### INTRODUCTION

**Dr. Marcial-Rojas:** President of the Eastern District of the Puerto Rico Medical Association, Members of the Panel, Ladies and Gentlemen: The Symposium on Diseases of the Thyroid with Presentation of Cases that we are all going to conduct today has only been possible through the cooperation of the Scientific Committee of this District and the enthusiasm and efforts of the other members of this panel. I want to extend thanks for the help of these people that have done most of the work.

I think that the Scientific Committee has done a good job of choosing the subject. The concepts of pathology, physiology and treatment of thyroid diseases have undergone so many recent changes that this alone more than justifies this symposium.

The pattern of growth of tumors of the thyroid is frequently different from that of tumors in other locations. There are so many variations and inconsistencies of behavior among thyroid tumors, which coupled with the relative infrequency in the everyday practice of medicine in the usual general hospital, produce a degree of uncertainty in their evaluation to both pathologists and clinicians.

The classification of tumors of the thyroid should be clearly understood because in no other organ is it of such paramount im-

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portance as in the thyroid to determine the type of therapy to be instituted. In most organs the treatment of tumors is more or less standardized; in the thyroid the type of treatment completely depends upon the histopathologic diagnosis.

With all this in mind this symposium has been designed to be useful not only to the pathologist, but to the surgeon and clinician as well. We must not fail to overemphasize that tumors of the thyroid, for practical purposes, are a problem of living surgical pathology rather than of pathologic anatomy.

Before going ahead with the cases I want to inform you that the members of this panel will welcome questions and comments from the audience at the end of the symposium.

**CASE I.** A 25 yr. old woman came to her physician complaining of nervous excitability, fatigue and loss of weight. Palpitations were occasionally present. She had a voracious appetite. On physical examination there was a peculiar staring expression of the eyes with slight exophthalmos. The thyroid was symmetrically and diffusely enlarged but soft. The BMR was + 20%. The patient was prepared for surgery. A thyroidectomy was performed with no complications.

**Dr. Marcial-Rojas:** Dr. Andino, what is your clinical impression?

**Dr. Andino:** My clinical impression in this case is that of Graves' disease (hyperthyroidism).

**Dr. Marcial-Rojas:** Would you need any other laboratory studies to confirm this diagnosis?

**Dr. Andino:** Yes, I would like to do a 24 hr. radioiodine uptake, a total serum cholesterol, a circulation time and X-Ray of the chest with a barium swallowing function to determine if there is any retrosternal extension of the goiter.

**Dr. Marcial Rojas:** Dr. Busó, would you comment upon the pitfalls in the radioiodine uptake determination and its interpretation?

**Dr. Busó:** Interpretation of radioiodine uptakes is subject to pitfalls. An anatomically large thyroid gland specially in an euthyroid adolescent or in patients with iodine-want goiters may have an increased uptake. A similar error may result following the administration of thyroid stimulating hormone or immediately after cessation of antithyroid medication. False low uptakes are usually the result of testing thyroid function while the gland is under the depressing action of one or more of the following:

(A) Thyroid extract or thyroid hormone.

(B) Iodine or iodides in any form, including iodized table salt, cough mixture, vitamins-minerals preparations, and X-Ray contrast media.



- (C) Goitrogens such as thiocyanates, nitrates, and large intake of the *Brasica* family of vegetables which includes cabbage, cauliflower and turnips.
- (D) Anti-thyroid drugs, namely Tapazole and propylthiouracil.

**Dr. Marcial-Rojas:** Dr. Andino, what are the pitfalls of the BMR determination?

**Dr. Andino:** The BMR is still a useful and reliable index in the diagnosis of hyperthyroidism provided it is properly evaluated. We all know that an increase in the BMR may occur in a number of states totally unrelated to hyperthyroidism, such as pregnancy, acute and chronic anxiety states, hyperpituitarism, leukemias, malignant hypertension, pheochromocytomas, infectious diseases and febrile states from any cause whatsoever.

The normal BMR varies usually within a range of  $-10$  to  $+15\%$ . Each determination has to be evaluated individually as true hyperthyroidism may exist with a BMR of  $+10\%$  in a patient whose normal BMR may range from  $-10$  to  $-20\%$ . The converse might also exist. One also has to be very careful in differentiating between hypothyroidism and hypometabolism; in the latter state the individual might exhibit a low BMR without any evidence of clinical hypothyroidism.

The most important point in the interpretation of an elevated BMR is to determine whether it is caused by hyperthyroidism or by an anxiety state. The hypermetabolism of the anxiety state can be eliminated by doing the BMR under penthotal anesthesia as recommended by Bartels, or by doing the procedure under heavy sedation. A point to remember that is frequently missed is that the BMR might be markedly elevated as the result of the loss of oxygen resulting from a perforated eardrum.

**Dr. Marcial Rojas:** Dr. Andino, what is the PBI and what is its value in the diagnosis of thyrotoxicosis?

**Dr. Andino:** The protein-bound iodine represents that amount of iodine in the serum which is bound to protein, mostly to the albumin fraction but to a lesser extent to the globulins. It is organic iodine and most probably represents the circulating thyroid hormone. It has been considered by many the most accurate index of thyroid function as it measures directly the production of hormone by the gland. The normal values, which vary from one laboratory to another depending upon the geographical location, are between 4 and 8 micrograms %. In connection with any determination of the PBI it must be remembered that any increase in the inorganic iodine in the plasma might simultaneously increase the organic protein-bound fraction. This is due to the fact that inorganic iodine, when present in excess, is capable of forming a

loose combination with protein and is precipitated with hormone iodine. On the other hand, in patients with hypoalbuminemia the PBI is often reduced to very low concentrations, even as low as those in myxedema, without any clinical evidence of hypothyroidism. This is frequently seen in the nephrotic state.

This procedure is only done in the large medical centers in the United States. It is not done here in Puerto Rico.

**Dr. Marcial Rojas:** Dr. Busó, in what specific diagnostic problems will the radioiodine uptake help elucidate the final diagnosis?

**Dr. Busó:** Thyroid radioiodine uptake is of paramount diagnostic importance in the following difficult situations:

(A) Hypermetabolic states without hyperthyroidism, such as may occur in leukemia, polycythemia, acromegaly, pheochromocytoma, hypertension, aortic stenosis, dyspneic conditions, especially those due to cardiac insufficiency, and dinitrophenol ingestion. The radioiodine uptake is normal in the above mentioned states.

(B) Thyrotoxicosis due to excessively ingested thyroid hormone (thyrotoxicosis factitia). A thyrotoxic individual without symptoms and signs of goiter with a subnormal radioiodine uptake that cannot be classified as a false test, must be suspected of ingesting large quantities of thyroid medication, even if he denies it.

(C) Cardiac patients with intractable congestive failure or uncontrolable arrhythmias.

**Dr. Marcial-Rojas:** Dr. Busó, what are the indications and contraindications of radioiodine therapy?

**Dr. Busó:** Radioiodine is used therapeutically whenever it is necessary to destroy thyroid tissue. Thyroid hyperfunction and thyroid cancer are the main indications. Euthyroid patients with intractable conditions of the heart and lung may have their thyroid gland destroyed in an effort to decrease the general metabolic demands.

We consider pregnancy after the third month of gestation as the only definite contraindication to radioiodine therapy in hyperthyroidism. Possible destruction of the fetal thyroid is the basic consideration. Because of the theoretical carcinogenic effects of radioiodine one does not like to employ it in patients below the age of 40. It seems to be the treatment of choice for diffuse toxic goiters at or above this age level.

**Dr. Marcial Rojas:** What is the preoperative management of these patients with Graves' disease?

**Dr. Andino:** Treatment with antithyroid drugs (either Tapazole or propylthiouracil) until an euthyroid state is achieved. This is followed by inorganic iodine by mouth for 10 days to two weeks

prior to surgery. The antithyroid medication should be continued until the day of operation.

**Dr. Marcial Rojas:** Dr. Vallecillo, what is the operation performed and what are its complications?

**Dr. Vallecillo:** The treatment of choice, at least in the younger age group, is surgical. This consists of a subtotal thyroidectomy, leaving only a small portion of the posterior portion of each lobe, thus insuring preservation of the parathyroids, and removing completely the isthmus and the pyramidal lobe if this is present.

Thanks to the successful preparation of patients for thyroidectomy by our medical confreres, some of the complications of treatment has been minimized or completely eradicated.

Complications are immediate and delayed. The most important immediate complications are those of hemorrhage and or respiratory obstruction. Hemorrhage may be the result of extreme restlessness, effort at vomiting or strain. If the bleeding occurs from one of the superior thyroid arteries a large hematoma is rapidly formed which causes severe respiratory obstruction and may be fatal, if not immediately evacuated. Respiratory obstruction may also be the result of laryngeal edema, which may not be so dramatic at its onset, but which may progress and, unless a tracheostomy is performed, the patient may die. Although damage to both recurrent laryngeal nerves should not occur in subtotal thyroidectomy, this may also produce severe respiratory difficulties which may be permanent. Damage to one recurrent laryngeal nerve occurs in about 1% of the cases and leads to hoarseness but not necessarily to respiratory obstruction.

Delayed complications are those of parathyroid tetany which may have its onset after the third day and which is not as common as it is often feared. It does occur more frequently in total thyroidectomy for malignant disease where the parathyroids often have to be sacrificed.

Hypothyroidism occurs in about 10% of cases and may become evident as the result of too generous ablation of thyroid tissue. Recurrence of toxicity occurs in 5 to 15% of cases because of insufficient removal of tissue. Malignant exophthalmos is not a complication of surgery but rather due to poor selection of a case for thyroidectomy.

I have left for the last the previously dreaded thyroid storm. Fortunately, today with the proper medical preparation of toxic patients, these are brought to operation in an euthyroid state and these complications are practically nonexistent.

**Dr. Marcial Rojas:** How does the incidence of post-operative myxedema compare with that after radioiodine therapy?



**Dr. Andino:** The incidence of post-operative myxedema in large surgical clinics in the continent has been reported to vary from 4 to 12%. Dr. Catell from the Lahey Clinic reports an incidence of 4.5% in a series of 1,000 cases of hyperthyroidism. In a preliminary survey by Dr. Lillian Haddock of our cases of hyperthyroidism in the San Juan City Hospital who had been subjected to surgery she found an incidence of 25%. Although we have not finished compiling our statistics I believe that our incidence here is much higher, probably in the vicinity of 40 to 45%. Indirect evidence in favor of this point is the fact that 55% of the hypothyroid patients in our clinic owe their disease to surgery.

Dr. Busó will discuss the question of post-radioiodine myxedema.

**Dr. Busó:** As we have relied on a system of repeated divided doses at bi-monthly intervals since 1952 in the treatment of hyperthyroidism, our incidence of myxedema has been low. We have produced hypothyroidism in four patients out of a total of 125. This is an incidence of 3.2%. Two of these four cases had only temporary hypothyroidism. Two of the patients required substitution therapy.

**Dr. Marcial Rojas:** You can see the diffuse enlargement of the thyroid and its meaty appearance (Fig. 1). Microscopically (Fig. 2) the lining epithelium is tall and in areas showing papillary projections. The colloid exhibits a marginal scalloping which is characteristic. The height of the epithelium depends upon the degree of involution. Lymphoid infiltration of the stroma usually accompanies the involuting gland.

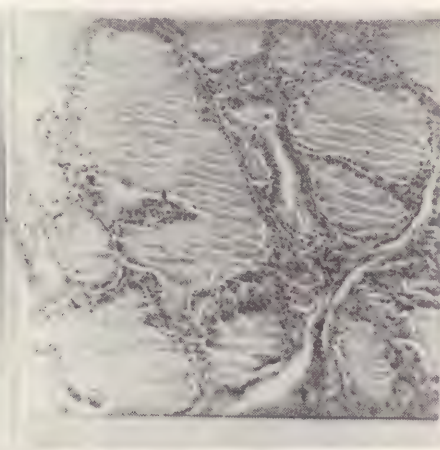


Fig. 1 (Case I) - Diffuse toxic goiter.

Fig. 2 (Case I) - Diffuse toxic goiter.

**CASE II.** A 30 yr. old woman noticed a painless mass in the left side of the neck that had grown progressively during the previous three months. On physical examination there was a movable lymph node in the anterior triangle on the left side of the neck. It measured about 3.5 cm. in main diameter. The thyroid failed to disclose any abnormalities. A frozen section of the cervical lymph node revealed metastatic papillary carcinoma from the thyroid. A total thyroidectomy and left radical neck dissection were performed.

**Dr. Marcial-Rojas:** Dr. Marcial, what is the present concept of lateral aberrant thyroid?

**Dr. Víctor Marcial:** The so-called lateral aberrant thyroid which originally was considered an embryonal misplaced portion of the thyroid is no longer accepted as such. Nowadays we know that it constitutes a metastatic manifestation of a primary thyroid tumor. This is so regardless of how mature and functional the metastatic manifestation may be.

**Dr. Marcial Rojas:** What is the treatment for papillary carcinoma of the thyroid?

**Dr. Vallecillo:** This interesting type of carcinoma of the thyroid comprises about 50% of all malignancies of the gland. Its biologic predilection is towards metastatic spread to regional cervical lymph nodes where it may remain localized for periods of 5 to 25 years prior to remote dissemination. The variable natural history of this neoplasm includes vagaries such as multiple foci of intraglandular tumor in about 20 to 30%, many occult primaries producing lateral aberrant thyroid cancer and often regional dissemination to the contralateral cervical nodes up to 13%. These facts dictate one logical way to treat the disease, that is: by total thyroidectomy and radical neck dissection in continuity. The neck dissection is advised in the ipsilateral side in the cases with no palpable lymph nodes. Statistics show that when no lymph nodes are palpable the histopathologic examination exhibit metastatic disease in about 50 to 60% of the cases. With such favorable natural history of this neoplasm and the notable chronicity of it, we should be aggressive in its treatment and thus improve its end-results.

**Dr. Marcial Rojas:** Dr. Andino, what is the prognosis of papillary carcinoma of the thyroid?

**Dr. Andino:** Excellent, if the disease has been treated adequately as emphasized by Dr. Vallecillo. One must remember that the degree of malignancy of this condition increases with age and is more malignant in the older person than in the younger one. In the young person the treatment must be adequate because even

if the grade of malignancy is low the disease may shorten the life-span of the patient considerably.

**Dr. Marcial Rojas:** Dr. Marcial, will you comment upon the relation of previous irradiation for thymic enlargement in children and the incidence of thyroid carcinoma?

**Dr. Victor Marcial:** The relationship of previous irradiation to the thymus and the development of carcinoma of the thyroid is not yet completely cleared. Some workers have pointed out that there is a definite relationship, others have doubted the statistical significance of the evidence available. Simpson, from the University of Rochester School of Medicine, investigated 1400 children who had thymic irradiation. He found out that 1% of them developed cancer of the thyroid. He stated that this was 75 times more than the expected incidence in his State, for that age group. I would not advocate the employment of radiation therapy for thymic enlargement in infants.

**Dr. Marcial Rojas:** What is the role of I-131 in papillary carcinoma?

**Dr. Busó:** Radioiodine is of value in the treatment of functional cancers of the thyroid. This is particularly true in the case of the follicular type with colloid formation. The papillary type does not have significant uptake of iodine but one must emphasize the fact that seldom these tumors are histologically pure. Tracer studies prior to surgical ablation of the primary malignancy may be most informative in this respect. We suggest that the performance of such studies on the day prior to surgery, coupled with autoradiographic prints of gland segments immediately after removal be established as routine procedures in the management of every thyroid cancer patient.

**Dr. Marcial Rojas:** What is the value of radiotherapy in papillary and alveolar carcinoma of the thyroid?

**Dr. Víctor Marcial:** Though these forms of cancer are surgical problems we do find cases where the primary tumor or the regional metastasis could not be completely excised. Radiotherapy is of definite value for these cases and one can control the disease for periods longer than five years in over one-third of the cases. Some workers have advocated the routine employment of radiotherapy after what it appears to be a complete surgical removal of the primary and or metastatic manifestations. They claim that the survival with surgery followed by radiation is better than when surgery is employed alone. We do not advocate the employment of radiotherapy instead of radical neck dissection when this is indicated. These tumors are of moderate radiosensitivity and high doses of irradiation are needed for their control.

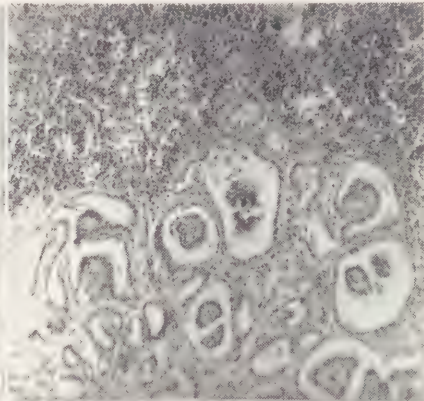


**Dr. Marcial Rojas:** As in most cases of papillary carcinoma of the thyroid (Fig. 3) the primary lesion is an occult and small one. The original manifestations are those of precocious metastases to the cervical lymph nodes. As of today I have seen and personally dissected fifteen cases of this disease and in all I have been able to encounter a primary occult tumor in the thyroid. These cases are going to be the subject of a separate communication. I just want to emphasize the variability of histologic characteristics of these tumors, which are usually of the mixed type, that is partly alveolar (Fig. 4) and partly papillary (Fig. 5).

(Fig. 3)



(Fig. 4)



(Fig. 5)

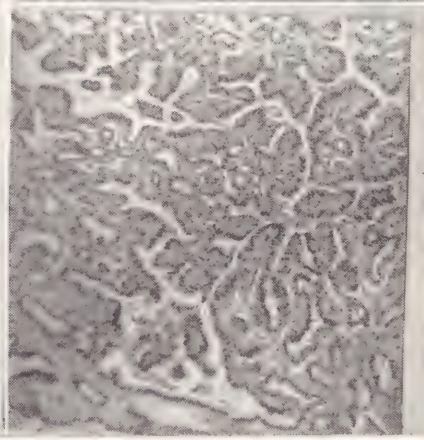


Fig. 3 (Case II) - Small primary tumor with large metastatic cervical lymph nodes.

Fig. 4 (Case II) - Alveolar component in lymph nodes.

Fig. 5 (Case II) - Papillary component.

**CASE III.** A 45 year old man who had a sore throat for three days after which he developed pain in the left side of the neck, in the region of the thyroid. On examination the left lobe was enlarged and very hard. Antibiotic therapy was administered

for a week but the firm thyroid mass in the left lobe persisted. A left hemithyroidectomy was performed.

**Dr. Marcial-Rojas:** The gross appearance (Fig. 6) of subacute thyroiditis is that of grayish-yellow firm tissue with fibrillary areas. A frozen section should always make the diagnosis before surgical ablation is performed thus to enable preservation of thyroid tissue. Microscopically (Fig. 7) one can easily recognize the inflammatory process, microabscesses, colloid giant cells and the areas of fibrosis. Dr. Andino, what are the relations of upper respiratory tract infections and allergic conditions to acute and subacute thyroiditis?



Fig. 6 (Case III) - Subacute granulomatous thyroiditis.

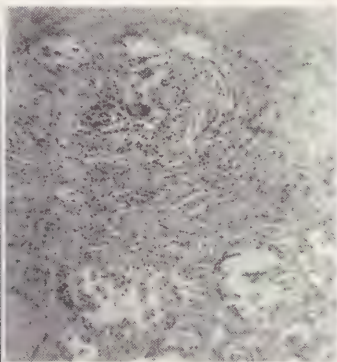


Fig. 7 (Case III) - Colloid giant cells.

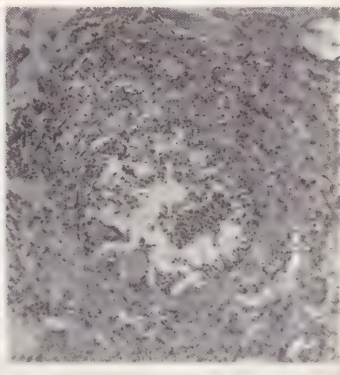


Fig. 8 (Case III) - Microabscess and early colloid giant cell formation.

**Dr. Andino:** The relation is quite intimate as the development of thyroiditis of this type is very frequently preceded by an upper respiratory tract infection. Other infectious processes have been associated with these conditions, such as scarlet fever, measles, diphtheria, pneumonia, malaria, acute otitis media and others. This disease condition very seldom produces suppuration, but in the early stages it is very difficult to differentiate between the acute infectious thyroiditis which might give rise to suppuration and the acute thyroiditis which goes into the subacute phase and might last from three to five months (de Quervain's type). The question of the allergic factor is a more indefinite one. In this respect it might be interesting to mention certain recent observations concerning the pathogenesis of acute and subacute thyroiditis. It has been shown that the histologic picture of the granulomatous type of thyroiditis can be produced in rabbits by repeated injections of antirabbit thyroid serum. This seems to link this disease to the hypersensitivity states and explain its excellent response to steroid therapy.



**Dr. Marcial Rojas:** What is the value of radioiodine in the diagnosis of acute and subacute thyroiditis?

**Dr. Busó:** In this particular instant the radioiodine uptake would be normal or depressed depending on the degree of inflammation. Severely inflamed cells are expected to show less iodine uptake.

**Dr. Marcial Rojas:** What is the value of radiation therapy in acute and subacute thyroiditis?

**Dr. Víctor Marcial:** Radiation therapy is of definite value in the treatment of acute and subacute thyroiditis with the exception of the suppurative type. These patients are markedly troubled with pain, dysphagia, and sometimes respiratory difficulties. All these symptoms respond rapidly to radiotherapy. Some workers prefer radiotherapy to the employment of cortisone as the result with the first method is more permanent in nature.

**Dr. Marcial Rojas:** Dr. Andino, what do you consider the therapy of choice in acute and subacute thyroiditis?

**Dr. Andino:** Steroid therapy with Prednisone or Prednisolone is the treatment of choice in this type of thyroiditis. If there is any doubt as to the presence of an acute infectious process wide-spectrum antibiotics should be used in addition to the steroid.

**Dr. Marcial Rojas:** Dr. Vallecillo, when do you think surgery is indicated in this condition?

**Dr. Vallecillo:** Surgery is very seldom if ever indicated in acute thyroiditis, except in the case of true abscess formation, in which case incision and drainage should be done along with antibiotic therapy. A tracheostomy may be lifesaving procedure in some of these cases when the airway is compromised. Some indications might be found in the case of subacute thyroiditis, if after adequate medical therapy there remains an area of induration. This indication is not because of the disease *per se*, but because of the uncertain feeling that a malignancy might be present.

CASE IV. A 40 years old woman exhibited diffuse enlargement of the thyroid, slightly more prominent over the left lobe. The thyroid felt rubbery and firm. There were no symptoms of compression. The BMR was  $-1$ . A thyroidectomy was performed.

**Dr. Marcial-Rojas:** Struma lymphomatosa of Hashimoto usually produces a diffuse enlargement of the thyroid. Occasionally as in this case (Fig. 9) the enlargement is asymmetrical. A frozen section should be performed to avoid unnecessary surgery. On occasions it is difficult to differentiate Hashimoto's struma from diffuse small cell carcinoma in a single section, but in several ones it is accomplished. Microscopically (Fig. 10) the diffuse replacement of thyroid tissue by lymphocytic infiltrations and the atrophy and oxyphilia of the epithelium are diagnostic. The latter



is essential for the diagnosis as many other conditions of the thyroid show lymphocytic infiltration. Dr. Andino, would you comment about the incidence of this disease as to age and sex?



Fig. 9 (Case IV) - Hashimoto's struma.

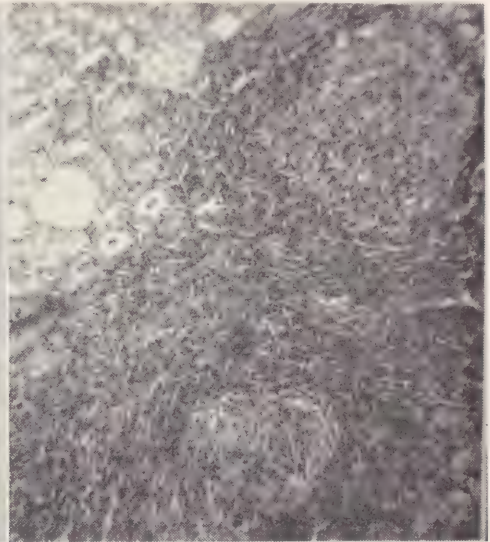


Fig. 10 (Case IV) - Lymphocytic infiltration and oxyphilia of Hashimoto's struma.

**Dr. Andino:** The struma lymphomatosa occurs almost exclusively in the female patients (90 to 95% of cases reported). It is usually found in the period of life between the 5th and 7th decade (40 to 60 years of age), although it can be seen in the younger woman. In one of the latest reports from the Columbia Presbyterian Medical Center, Virginia Frantz gives an incidence of 1.6% in 7448 thyroid operations. Although we do not have any statistics available I believe from my personal experience that the incidence in Puerto Rico is much higher than that.

**Dr. Marcial Rojas:** Dr. Vallecillo, what are the indications for surgery in chronic thyroiditis?

**Dr. Vallecillo:** Chronic thyroiditis presents similar problems to the surgeon as does subacute thyroiditis. The symptoms, often of choking, pressure, hoarseness, are quite similar to those of malignancy, and these, together with a firm, often nodular consistency of the gland makes the suspicion of malignancy more tenable. These are the only indications for surgery. However, if a frozen section can be done and a diagnosis of Hashimoto's disease established no further surgery should be performed. Dr. Marcial Rojas, what are the differential features between Riedel's and Hashi-

moto's thyroiditis and what are the histologic criteria for their diagnosis?

**Dr. Marcial Rojas:** The differential features between Riedel's and Hashimoto's thyroiditis are those of age, location, mode of growth, symptomatology and treatment. The woody thyroiditis of Riedel is encountered in younger patients, it is unilateral and extends into the adjacent cervical tissues as an infiltrating process producing severe pressure symptoms for which surgical excision is definitely indicated. It is extremely difficult to differentiate it clinically from carcinoma. If one follows these criteria of diagnosis it is evident that woody thyroiditis of Riedel is an extremely rare disease. It is not seen more than one in every five years in most of the largest thyroid clinics in the United States. I have never seen a true case of Riedel's in Puerto Rico.

Struma lymphomatosa of Hashimoto occurs in the older woman, is symmetrical, not as hard, can be easily separated from the adjacent cervical tissues and, thus, very seldom causes pressure symptoms. The most important histologic criteria of diagnosis in Hashimoto's I have already discussed. If these criteria are not used a number of diagnosed cases of both entities sharply rises and the terms Riedel's and Hashimoto's thyroiditis lose their diagnostic significance.

**CASE V.** A 45 years old woman who had noticed a progressive enlargement of the thyroid. This was accompanied by a moderate persistent cough, specially when in the recumbent position. No dyspnea was present. The mass in the neck was nodular, firm in areas, but mostly rubbery and soft. It extended to both sides of the neck and behind the suprasternal notch. There were no toxic symptoms or signs. A radiograph of the chest revealed a mass in the upper mediastinum. A thyroidectomy was performed.

**Dr. Marcial-Rojas:** The multiple adenomatous colloid goiter presents usually a characteristic gross appearance (Fig. 11). It is nodular and on section reveals numerous well delimited or poorly defined nodules. Many of the latter will show hemorrhage, fibrosis, calcification and cystic degeneration. Microscopically (Fig. 12) similar changes are seen. Areas of secondary hyperplasia should not be confused with papillary carcinoma. Dr. Vailecillo, would you enumerate the difficulties encountered in the differential diagnosis of single versus multiple thyroid nodules?

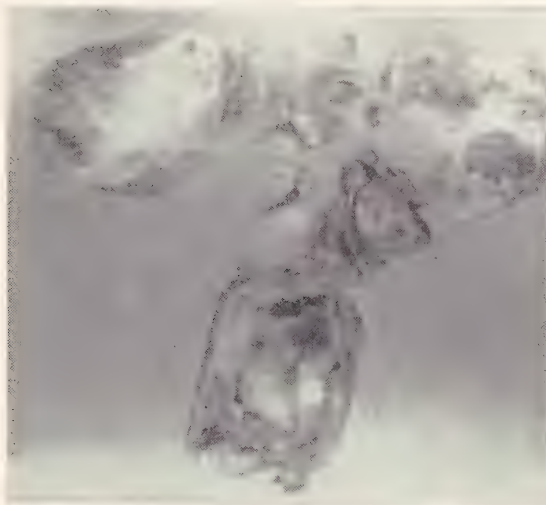


Fig. 11 (Case V) - Adenomatous goiter with retrosternal extension. Cut surface shows fibrosis, hemorrhage and cystic degeneration.

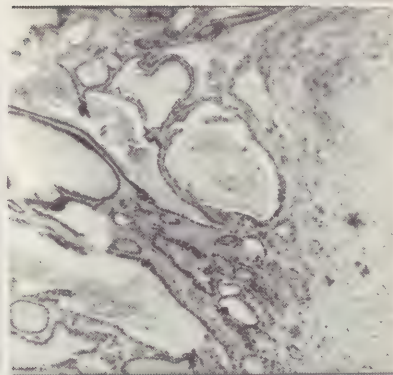


Fig. 12 (Case V) - Fibrosis and hemorrhage in adenomatous goiter.

**Dr. Vallecillo:** There is no difficulty in the obvious multinodular goiter but there is a great percentage of error in the clinical diagnosis of solitary nodules. A great number of these cases on surgical exploration turn out to be a dominant involutory nodule in a multinodular gland. Dr. Marcial Rojas, would you comment upon the incidence of malignant degeneration of solitary nodules as compared to that in multiple nodules?

**Dr. Marcial Rojas:** The incidence of malignant degeneration in solitary nodules of the thyroid is around 20% and that of multinodular lesions ranges from 0.5 to 10%. These statistics depend upon the correct evaluation as to multinodularity and upon the criteria for the diagnosis of carcinoma used in different laboratories. The more liberal the pathologist is calling papillary hyperplasias carcinomas, the highest is going to be the incidence of cancer in adenomatous goiter. Dr. Andino, what are the uses of dessicated thyroid and thyroxine in nodular goiter?

**Dr. Andino:** In 1953 Greer and Astwood described the results obtained in the administration of dessicated thyroid in patients with simple and nodular goiter. The results were quite impressive but other investigators do not appear as enthusiastic as them. It appears as if the results in the cases of simple diffuse goiter are more promising than in the nodular ones especially if the goiter is of early inception. I personally have seen very poor results in the multinodular variety.



At the present time we are using triiodo-thyronine in the therapy of simple diffuse goiter with fairly good results as far as regression is concerned.

**Dr. Marcial Rojas:** What are the indications for surgery in adenomatous goiter?

**Dr. Vallecillo:** Multinodular goiter often has to be treated surgically. The main indications are actual or threatened compromise of airway, retrosternal extension, secondary toxic changes which occur in about 20% of cases and for cosmetic improvement. The incidence of malignancy varies from 4 to 10% as reported by different investigators. However, since this may occur in very small sections of the gland, the concept of prophylactic removal of adenomatous goiters for prevention of carcinoma loses strength upon careful analysis of long-term clinical studies, unless one was prepared to advocate total thyroidectomy in every case, which obviously nobody would. If any suspicious areas are found at operation frozen sections of these would be the procedure of choice before embarking in a total enucleation of the gland.

**CASE VI.** A 40 years old woman with a clinical picture of hyperthyroidism and diffuse enlargement of the thyroid. The patient was prepared for surgery. A subtotal thyroidectomy was performed. The interesting features of this case are the pathologic ones.

**Dr. Marcial Rojas:** The gland grossly was typical of hyperthyroidism but on several transections a small stellate grayish-white lesion, looking like a small scar, was encountered. It measured 6 mm. in transverse diameter. Microscopically (Fig. 13) it proved to be a small papillary carcinoma with prominent fibrous stroma. This tumor was originally described by Crile as non-encapsulated sclerosing carcinoma. They are encountered incidentally in thyroids removed for other causes, mostly hyperthyroidism. Warren and Meissner believe they are incipient papillary cancers. Dr. Vallecillo, would you consider radical neck dissection in this type of tumor?

**Dr. Vallecillo:** These tumors very rarely metastasize, although a few of the cases reported by Klinik did show metastasis to cervical lymph node. In this particular case I do not think that prophylactic radical neck dissection should be considered, and only therapeutic neck dissection is indicated when the cervical lymph nodes are clinically involved.

**Dr. Marcial Rojas:** Dr. Andino, what is the incidence of associated thyrotoxicosis and cancer of the thyroid?

**Dr. Andino:** The old concept that hyperthyroidism and carcinoma never occur together appear to be fallacious as the condi-

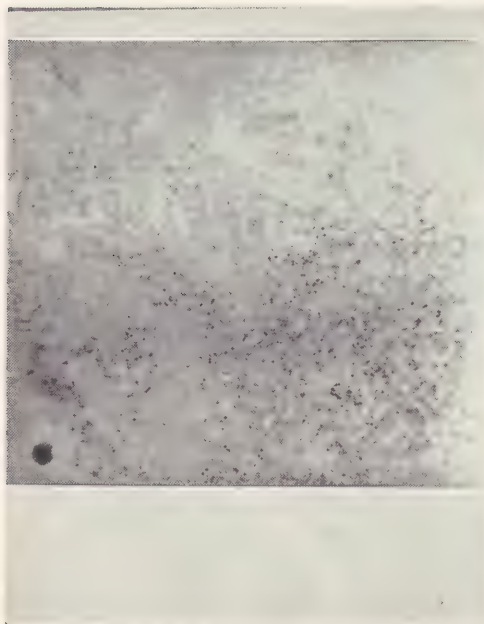


Fig. 13 (Case 6) - Non-encapsulated sclerosing carcinoma.



Fig. 14 (Case 7) - Hurthle cell adenoma of thyroid.

tions do occur together. The actual incidence is small, probably not exceeding 0.4%, although it has been reported as 1.75% by Pemberton and Black. We have seen one case in a series of 40 thyroidectomies for hyperthyroidism, but the series is too small for the figure to be of any significance. It appears to me that the condition might be on the increase as compared with the pre-thiourea-cil days. The continuous use of the anti-thyroid drugs might be responsible for this as these drugs have been proven to be carcinogenic in the experimental animal when given for a prolonged period of time.

**CASE VII.** A 36 years old woman had noticed a painless, gradual enlargement of the right lobe of the thyroid. There were no signs or symptoms of toxicity or of pressure upon the cervical structures. A hemithyroidectomy was performed.

**Dr. Marcial Rojas:** This is the right lobe of the thyroid (Fig. 14) almost completely replaced by a well-encapsulated tumor. It is very important to carefully see if there are enlarged blood vessels in the periphery which may grossly show tumor emboli. Numerous sections should be taken from different levels of the capsule to rule out capsular, lymphatic and blood vessel invasion. Five percent of adenomas showing one of the former will metastasize.



The present was a plain follicular adenoma of the "Hurthle cell type". This shows large eosinophilic cells with moderate anaplasia that should not be confused with cancer (Figs. 15 and 16).

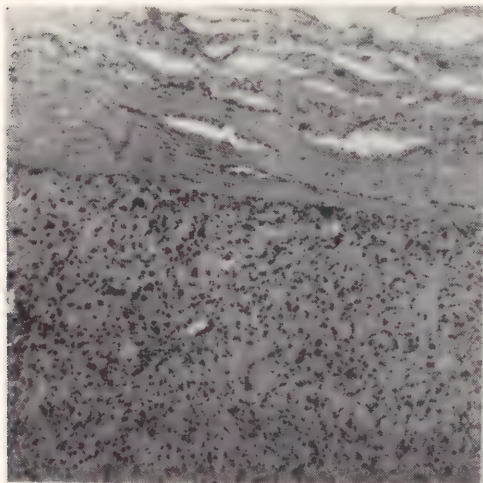


Fig. 15 (Case 7) - Capsule of Hurthle cell adenoma. No invasion is noted.

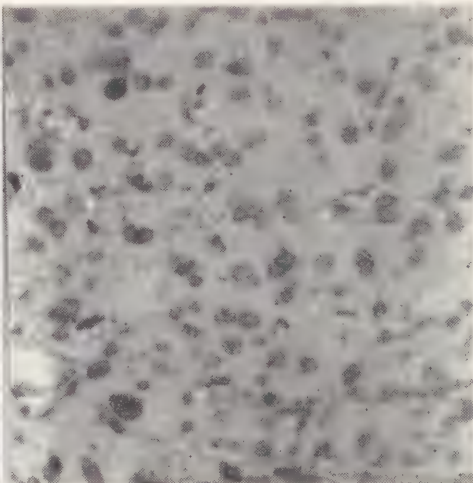


Fig. 16 (Case 7) - Higher magnification which show anaplasia of nuclei in a Hurthle cell adenoma.

**Dr. Andino:** It is difficult to ascertain with accuracy the incidence of thyrotoxicosis in solitary adenomas of the thyroid as one has to differentiate between "hot nodule" with thyrotoxicosis and the "hot nodule" without toxicity. Thus, the presence of a high uptake of I-131 on scanning over the nodule does not mean that the patient is toxic. In general these toxic adenomas are very rare. Cope and his group have reported 10 proven cases in a period of 10 years with an incidence of less than 0.5%. It is interesting to note that these adenomata shows an autonomy not dissimilar to that observed in active adenomata of the Isletes of Langerhans, the parathyroid and the adrenals. Dr. Marcial Rojas, what are the histologic criteria for the differential diagnosis of true neoplastic adenomas vs. adenomatous nodules of multinodular goiter?

**Dr. Marcial-Rojas:** In rare instances it is impossible to differentiate them, grossly or microscopically, but in the great majority of cases if we follow the criteria of Warren and Meissner it is possible. True adenomas are solitary, well encapsulated, compress the adjacent thyroid tissue, the tissues within the nodule are homogenous and different from the surrounding uninvolved thyroid tissue. In the adenomatous nodule, these are multiple, not as well encapsulated and the tissues within show similar changes as the



tissues outside the nodule. Dr. Marcial, what is the incidence of malignant degeneration in true neoplastic adenomas?

**Dr. Víctor Marcial:** The incidence of malignancy in true neoplastic adenomas reported in various series fluctuate from around 10 to 25%. The accepted figure is 20%. The results show that in children the possibility of a thyroid nodule being malignant is much higher than 20%. Dr. Marcial-Rojas, what are the relations between adenomas of certain histologic types and carcinomas of similar histologic architecture?

**Dr. Marcial Rojas:** In large series of Meissner and McManus from Lahey Clinic they encountered that out of 500 adenomas 86% were follicular and only 5% were papillary. The rest were unclassified. If one realizes that about 60% of the cancers of the thyroid are of the papillary type one must conclude that these arise as such without the previous existence of a benign lesion. The follicular carcinomas comprise about 20% of malignant tumors of the thyroid and these in all probability originate in their immense majority from pre-existent adenomas. Dr. Vallecillo, what is the treatment of true neoplastic adenomas?

**Dr. Vallecillo:** There is only one way to treat adenomas of the thyroid and that is by lobectomy of the affected side. To shell out or locally excise an adenoma which has a very good chance of being malignant is a violation of one of the principles of good cancer surgery. We may be cutting into or too near a malignant process. By performing a lobectomy we have at least initiated good and proper treatment for a potential cancer. It is, however, preferable to have the pathologist do a frozen section of the excised lobe and if found to be carcinoma proceed with the radical neck dissection.

**Dr. Marcial Rojas:** Dr. Busó, what is the value of radioiodine in adenomas of the thyroid?

**Dr. Busó:** True neoplastic adenomas showing hyperfunctioning would concentrate radioiodine. Only when surgery is impossible we would recommend internal radiation of such nodule.

**CASE VIII.** A 60 years old woman came to see the physician because of diffuse enlargement of the thyroid. She complained of rapid development of difficulty in swallowing and very recent and persistent hacking cough. The thyroid was diffusely enlarged and very firm. The borders were ill-defined and it could only be moved together with the larynx as a solid block of tissue. A thyroidectomy was attempted but the tumor extended to the trachea and could not be completely removed. The patient died three months after the operation.

**Dr. Marcial Rojas:** As usually in the cases of undifferentiated thyroid carcinomas, whether large or small cell type, the tumor is

already infiltrating the trachea and can not be completely removed. This was a large cell or so called "giant cell carcinoma" of the thyroid. Grossly it looks like any undifferentiated thyroid cancer (Fig. 17). Microscopically (Fig. 18) the anaplasia is evident and giant tumor nuclei are diffusely seen throughout. Dr. Marcial, do you have any statistics from the Bureau of Cancer Control as to the incidence of carcinoma of the thyroid in Puerto Rico?

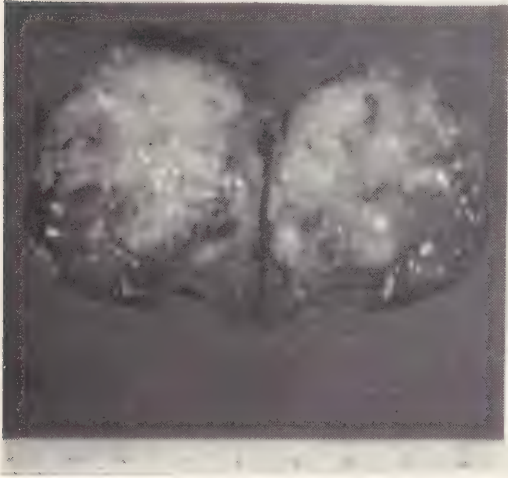


Fig. 17 (Case 8) - Giant cell carcinoma.

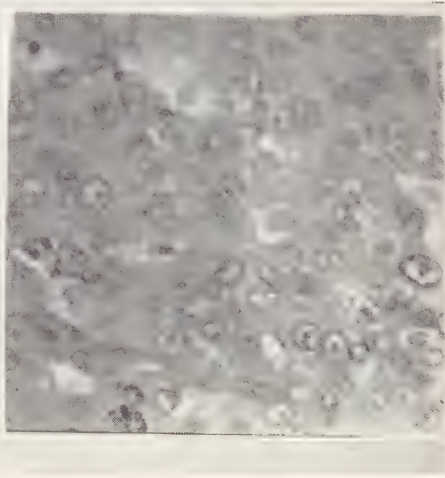


Fig. 18 (Case 8) - Giant cell carcinoma.

**Dr. Victor Marcial:** Carcinoma of the thyroid represents 1% of all forms of cancer in Puerto Rico. Women are more susceptible to it developing this form of cancer from 9 to 10 times more frequently than men. The relative incidence in women is 1% and in men is 0.1%.

The most common histologic type encountered is the papillary carcinoma. Out of 22 histologically proven cases reported to the Cancer Registry of the Bu. of Cancer Control during the year 1956 **thirteen** were of the papillary type, **three** were follicular and only **one** large cell tumor was reported.

**Dr. Marcial Rojas:** Dr. Vallecillo, would you discuss the clinical evolution and treatment of both small cell and large cell undifferentiated carcinomas of the thyroid?

**Dr. Vallecillo:** Undifferentiated carcinomas of the thyroid are of very rapid and invasive growth and by the time surgery is performed in most of them they extend already to the trachea and surrounding cervical structures. Their prognosis is very poor and the surgical procedure is usually limited to the decompression by partial resection. This is done as a purely palliative measure. The small cell carcinomas show around a 20% five-year survivals



while patients with the large cell carcinomas usually die on an average of six months after the diagnosis is made.

**Dr. Marcial Rojas:** Dr. Busó, what is the value of radioactive iodine in the diagnosis and treatment of undifferentiated cancers of the thyroid?

**Dr. Busó:** Undifferentiated thyroid cancers have no avidity for iodine. The medical literature reveals efforts at stimulating iodine avidity of undifferentiated cancers with thyroid stimulating hormone or anti-thyroid drugs. This has failed consistently and consequently eliminate the possibility of using radio-iodine as a therapeutic agent in this form of cancer.

**Dr. Marcial Rojas:** Dr. Marcial, what is the value of radiotherapy in undifferentiated cancer?

**Dr. Victor Marcial:** Undifferentiated cancers of the thyroid are inoperable in around 75% or more of the cases. Here radiotherapy is of particular value specially in the small cell type. In a recent series of the Middlesex Hospital in London, treated by radiotherapy, over one-fourth of the cases lived five years. These tumors frequently develop metastases. The giant-cell type is not very responsive to radiotherapy.

**CASE IX:** A 20 years old woman had a thyroid operation six years prior to admission for thyroid enlargement. The type of operation performed and the final diagnosis were not available, even after considerable search. She presented a marked induration of the surgical scar in the neck and several nodes in both sides of the neck away from the thyroid. A biopsy of one of these nodes revealed well differentiated thyroid tissue. No lymphoid tissue was recognizable but in view of the location and the clinical picture a diagnosis of carcinoma of the so-called "benign metastasizing goiter", was made. A thyroidectomy and radical neck were planned but the tissues of the neck were all infiltrated with tumor all the way to trachea. Most of the thyroid was removed with the adjacent tissues but the tumor could not possibly be eradicated. She was followed with radiotherapy and at present she is asymptomatic.

**Dr. Marcial Rojas:** This type of tumor presents the difficulty of histologic diagnosis. As you can see in the slide (Fig. 19) it is impossible to say on a purely histologic basis that this is a tumor and not an adenomatous goiter. Only by the location and extension of the lesion is the diagnosis made. When the tissue is en-



countered in lymph nodes, then the diagnosis is certain, or as in this case, when it extends enveloping trachea and adjacent structures.

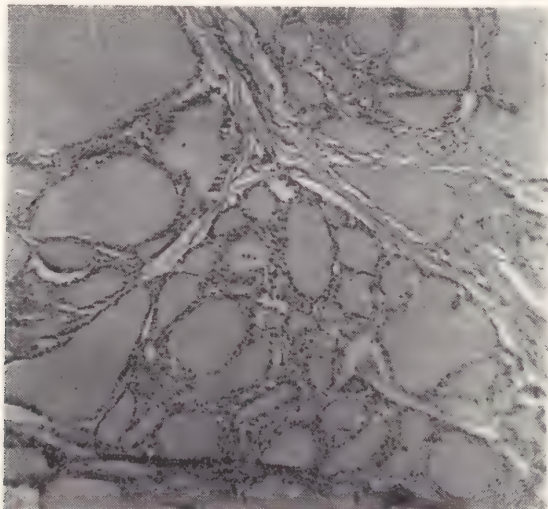


Fig. 19 (Case 9) - "Benign metastasizing goiter" in cervical tissues.

## PRIMARY HYPOTHYROIDISM — A REVIEW

MANUEL E. PANIAGUA, M.D.\* and HECTOR R. FREYTES, M.D.\*\*

HYPOTHYROIDISM is a very common condition in Puerto Rico which frequently goes unrecognized and untreated especially when it occurs in patients without obvious goiter. The lack of attention that this disease has received in our recent medical literature has prompted us to review some well-known but often forgotten facts about it.

In the first place we want to justify our preference for the term hypothyroidism over the generally used one of myxedema. The former states the specific glandular dysfunction while the latter only describes one of its physical signs, just as the pigmentation in Addison's disease or the jaundice of some hepatic dysfunctions. The term cretinism we reserve for the condition in children with its concomitant retardation of growth and mental development. We do not place too much emphasis on the differentiation between the congenital form (true athyreosis) and so called juvenile hypothyroidism since the deficiency, occurring before physical and mental development has been completed, results in irreversible damage of variable degrees of severity.

An analysis of the patients from the Endocrine Clinics of the Río Piedras Municipal and Presbyterian Hospitals plus the private practice of the senior author reveals that hypothyroidism is by far the most common disease of the thyroid gland; as a matter of fact, it accounts for nearly half of the total number of cases. A breakdown of the data as shown in Table I reveals that only 87 out of a total of 110 cases of hypothyroidism were primary or idiopathic, one was secondary to chronic thyroiditis, 4 secondary to hypopituitarism and 18 following thyroidectomy. Of our 87 primary hypothyroids 16 had goiters, among them 2 cretins.

What might be more interesting than the relative incidence of hypothyroidism among our patients is the frequency with which it goes unrecognized, especially when mild. It is also more likely to be overlooked in patients without noticeable goiter or telltale operative scar. Many of our cases from the Río Piedras City Hospital were not referred to the Endocrine Clinic directly but were picked up during their hospitalization for some other condition. A high degree of suspicion will lead to the proper investigation of these patients and the correct, if sometimes additional, diagnosis of hypothyroidism.

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In our experience, many of the middle-aged, fat, apathetic women with scanty eyebrows and dry skin who frequent our Out-Patient Departments complaining of weakness, tiredness, aches and pains throughout the body, and are usually classified as psychoneurotics turn out to be mildly hypothyroid when properly investigated. These are the patients who very seldom reach an Endocrine Clinic and whose disease is only discovered when they are admitted for some other reason.

Once our suspicion has been aroused by the clinical features described above a few simple tests will confirm the diagnosis. We have found out that the BMR is quite reliable when properly performed under heavy sedation and having the patient stay overnight in the hospital. The 24-hour radioiodine uptake has varied from 3% in a cretin all the way up to 20% and most of the patients who have suffered total thyroidectomy and radical neck dissection for carcinoma have shown values around 6-7% even in the absence of metastases or detectable thyroid tissue.

After the diagnosis has been established it has been our custom to start these patients on a very small daily dose of substitution therapy ( $\frac{1}{4}$ - $\frac{1}{2}$  grain of thyroid extract; 5-10 micrograms of tri-iodo-thyronine) and increase it gradually until an adequate level is reached as judged mostly by clinical features alone. This regime usually produces the most satisfactory results and is highly rewarding to both patient and physician.

The preceding remarks apply only to primary hypothyroidism whether due to so-called atrophy of the thyroid of unknown origin, to chronic inflammation or infiltration with neoplastic tissue, or destruction of the gland due to excessive radiation or overenthusiastic surgery. In cases due to the administration of anti-thyroid drugs or goitrogenic substances it usually suffices to remove the causative agent and in those associated with iodine deficiency, treatment should be supplemented with small doses of Lugol's solution.

Hypothyroidism secondary to pituitary deficiency poses a more complicated problem which falls out of the scope of this communication. We would like to emphasize, however, that since the lack of commercially available thyrotrophin makes it necessary to use thyroid extract or, better still, tri-iodo-thyronine in these cases, it should be given with utmost care and only after the adrenal cortex has been primed by exogenous ACTH to avoid precipitating an Addisonian crisis.

In conclusion, we want to emphasize the frequency of hypothyroidism in Puerto Rico and the need of alertness on the part of all physicians in order to diagnose it early and correct it properly -- and easy and very rewarding procedure.



TABLE I

Original Diagnosis	No. of Cases	Treatment Recommended	Treatment Carried Out	Results
<i>Hypothyroidism</i>				
1) Primary	87	Thyroid extract	As recommended	Euthyroidism
2) Secondary to hypopituitarism	4	or tri-iodo-thyronine		
Diffuse, non-toxic goiter	43	Lugol's sol.	Subtotal thyroidectomy in one	1 Post-op. hypothyroidism
Diffuse, toxic goiter	52	Medical -----	16 (2 failures)	4 relapses subsequently given I <sub>131</sub>
		Surgical -----	9	4 hypothyroid; 1 died Post-op.
		Radiation -----	14	all became euthyroid
		No follow-up -	3 7	
Modular, non-toxic goiter	25	Surgery	Surgery	16
				Cancer found in 4 cases, 3 of which underwent total thyroidectomy. 6 cases hypothyroid (incl. 3 above)
Modular, toxic goiter	3	Surgery	Surgery	3
				Cancer found in 1 — total thyroidectomy with resulting hypothyroidism.
<i>Thyroiditis</i>				
Acute	3	Medical		
Chronic, non-specific	1	Medical		
Riedel's	3			
Hashimoto	2	Surgery (nodular)	Surgery	1
				1 spontaneous hypothyroidism 1 post-up. hypothyroidism
Unknown	5		Surgery	5
				Cancer found in 1 All 5 are hypothyroid
TOTALS	218			Post-op. hypothyroidism 18
Hypothyroids	110			Cancer found in 6

## EL MEDICO Y LA COMUNIDAD\*

*Señor Presidente,*

*Distinguidos miembros de la Mesa Presidencial,*

*Huéspedes ilustres, compañeros todos, damas y caballeros;*

Mi ilustre predecesor y querido amigo, el Dr. Manuel Guzmán Rodríguez, planteó por vez primera en una noche como ésta hace ya algunos años, la realidad irrefutable de la pérdida por el médico del sitio de distinción que anteriormente ocupaba en las diversas esferas de nuestra comunidad. A muchos nos chocó este concepto y muchos fuimos los que creímos que si no equivocado del todo, cuando menos estaba decididamente exagerado. Los que nos pavoneábamos dentro de nuestra autosuficiencia científica repositamos ufanos que hoy más que nunca el médico servía a la comunidad, ya que con su ciencia abarcadora ofrecía a sus conciudadanos rápida curación de sus dolencias. Y no hay duda que en ese sentido puramente científico estamos llenando nuestro cometido a cabalidad. Como clase, podemos asegurar, que aguijoneados por el deseo de rendir el mejor servicio a nuestros enfermos, nos preocupamos intensamente y nos esforzamos por mantener nuestro bagaje de conocimientos repleto de los últimos adelantos y progresos de nuestra ciencia. En esa fase de nuestra profesión, la clase médica de Puerto Rico va a la vanguardia con los científicos del mundo entero y los servicios profesionales que ofrecemos son de tan alto calibre como los de cualquier centro médico del universo. Estamos conformes, estamos satisfechos, estamos orgullosos de estas hazañas puramente profesionales.

Pero no son estos méritos como facultativos los que nos han de hacer acreedores al sitio a que se refería el compañero Guzmán Rodríguez. Debemos, **tenemos** que desarrollar otros aspectos de nuestra personalidad como ciudadanos si es que deseamos conservar (algunos de ustedes dirán recuperar) nuestro puesto de mérito en nuestra sociedad.

Se ha dicho, y sin duda con mucha razón, que la juvenil ciencia médica ha subyugado, relegado a segundo lugar el antiguo arte de sanar; que los intereses primordiales de la medicina moderna giran alrededor de nuestra preocupación por el aspecto frío e impersonal de la ciencia, en perjuicio del enfermo a quien ya no consideramos como un ser humano, dotado de un cerebro y un alma. Nuestras escuelas de medicina convierten hoy a sus estudiantes en médicos científicos insuperables, olvidándose con frecuencia de

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\* Discurso presidencial pronunciado por el doctor Jaime F. Pou, durante la sesión inaugural de la Quincuagésima-tercera Asamblea Anual de la Asociación Médica de Puerto Rico.

adoctrinarlos en aquellos conceptos básicos psicológicos, humanos, caritativos y cristianos que los han de preparar para bregar con sus semejantes en una forma amistosa, amable y comprensiva. Y no debemos esperar a que el estudiante llegue a la escuela de medicina para comenzar nuestro plan de humanización. Debemos remontarnos a sus años de antesala profesional, aquellos en que en su colegio de preparatoria médica el estudiante joven y un tanto atolondrado se desliza sobre una serie de materias sin detenerse lo bastante para que éstas dejen huellas en su personalidad. Decía recientemente el Rector Kimpton de la Universidad de Chicago, que al estudiante solicitar su ingreso a la escuela de medicina, generalmente ha recibido "una enseñanza monótona, inflexible y estereotipada la cual se ciñe a ciertos requisitos estrictamente prescritos". Alega el Dr. Kimpton que debido a lo inseguro de ser admitido a una escuela de medicina, el presunto candidato evita las asignaturas culturales a las cuales el comité de ingresos por lo general les da poca importancia. Añade el Dr. Kimpton que típicamente, el currículo en los años de preparatoria convierte al estudiante en un robot, huérfano de cualidades creadoras, de apreciación crítica y de las dotes de razonar libremente, cualidades todas tan esenciales en un dirigente de una comunidad.

Insistamos en una educación fundada sobre bases sólidas y liberales en las cuales se destaquen los idiomas y las ciencias filosóficas, políticas, sociales y económicas. Bajo ningún concepto permitamos que en nuestro país se disminuyan estos requisitos que hoy se exigen de todo estudiante que se prepara para ingresar a la escuela de medicina.

Además de sus preocupaciones profesionales, todo médico debe demostrar genuino interés en el bienestar de sus conciudadanos. Dichoso el día en que nuestros pacientes nos tengan en aprecio no solo por nuestra pericia y nuestro instrumental sino también por nuestras dotes como persona. ¡Y cuán feliz no se han de sentir ellos a su vez cuando nosotros aprendamos a reconocer la persona dentro del paciente y no sólo la entidad patológica que él presenta!

Posiblemente no haya en toda la gama de las relaciones humanas nada que se asemeje a las relaciones entre el paciente y su médico. El hombre acude al sacerdote en busca de paz para su mente, consuelo para su espíritu y absolución para su alma. Consulta a su abogado para asesoramiento en circunstancias conflictivas y amenazadoras. Pero de nosotros, mis estimados compañeros, el hombre espera recibir percepción penetrante, tranquilidad duradera y curación tangible. El confía en nosotros para que le interpretemos sus conflictos internos, conflictos que él nunca podrá analizar sin nuestra ayuda sincera. No perdamos de vista



el hecho de que el ser ante nosotros no está sano. Recordemos que por mucha madurez mental que posea un individuo, al perder él su salud física puede ocurrir en su psiquis una decidida reversión hacia lo infantil; pierde gran parte de sus cualidades para enfrentarse a la vida y desarrolla inseguridad, ansiedad, neurosis. Su mayor deseo, como es natural, es que la primera consulta culmine en un diagnóstico seguro, una terapia sencilla y un pronóstico halagador! Sus preguntas no siempre articuladas, habrán de ser: "¿En qué consiste mi mal?"... "¿Cuánto tiempo tardaré en curarme?"... "¿En cuánto me ha de salir la fiesta?"... El médico que ante los ojos del paciente desea calificar como "bueno", tendrá contestaciones lisonjeras para estas tres preguntas.

Si es que pretendemos que la comunidad se beneficie hasta el máximo de los adelantos de la ciencia médica debemos antes que nada hacer ciertos ajustes en los lazos que unen el médico generalista al especialista. Frecuentemente, estas relaciones son tan vagas, inciertas e imprecisas que necesariamente contribuyen muy poco a la solución de un problema médico determinado. Las fallas en nuestro sistema actual se ponen de manifiesto con mayor relieve en casos oscuros y enigmáticos, que son referidos de aquí y de allá, en vana búsqueda de un diagnóstico y de un tratamiento efectivo. El paciente es sometido a una serie de consultas, reconocimientos y pruebas que las más de las veces, debido a la falta de coordinación con el médico de cabecera, sólo conducen a frustraciones, confusiones... y erogaciones. Termina el enfermo desanimado ante el esfuerzo mal orientado y con un alto grado de desconfianza hacia todos los protagonistas. No hay duda que el cuadro que yace escondido, latente en este acertijo de diagnóstico podría plasmarse en realidad si alguien tuviera la inclinación y la oportunidad de unir todos los fragmentos. Lógicamente, se impone que la medicina moderna implante normas, de suerte que los hallazgos de tres, cuatro o más especialistas sean finalmente cotejados y evaluados por el médico quien inició el estudio del caso.

Y el mal no yace exclusivamente en nuestra profesión. Son muchos los enfermos que se toman la prerrogativa, que no les pertenece, de buscarse sus propios especialistas; son pocos los enfermos que le permiten a su médico de familia la oportunidad de que él los guíe a través de este laberinto de incertidumbres. Respalde-mos al médico generalista, eslabón esencialísimo de nuestra medicina moderna y démosle la ingerencia que le corresponde. Otorguémosle el prestigio que se merece, y la comunidad aprenderá a solicitarlo, a reconocerlo como guía, como asesor, como la personificación del armamentario de la medicina moderna.

Toda organización humana está expuesta a las críticas de aquellos a quienes les sirve; la medicina no es una excepción a esta re-

gla y vemos cómo nuestra clase y algunos de nuestros compañeros, individualmente, reciben andanadas despiadadas, muchas veces injustamente, de miembros de nuestra comunidad. No creo sea éste el momento de ofrecer una defensa contra esos ataques, pero sí creo mi deber el señalar con dedo acusador a aquellos médicos quienes con sus comentarios desfavorables respecto a algunos de sus compañeros inician el descontento entre los ciudadanos. No hay justificación para que un médico manche su propia clase con acusaciones infundadas dirigidas contra alguno de sus compañeros, sin tener otra explicación u otro fundamento que el celo y la envidia profesional. Repudiamos al médico que públicamente condena a colegas suyos por supuesta incompetencia, corrupción, egoísmo o falta de ética. Igualmente censurable son opiniones o críticas que podamos emitir ante nuestros enfermos, encaminadas a desprestigiar a un colega. No deseo dar la impresión de que abogo porque se condone la negligencia o la falta de ética profesional o que pretendo que se nieguen o se oculten los errores cuando éstos existan; por el contrario, soy partidario de que sea la propia clase médica la que tome acción en estas fallas y creo fervientemente que debemos ser los primeros en poner nuestra casa en orden. Debemos alentar la crítica, pero ésta ha de estar bien documentada e inspirada por sentimientos honrados y constructivos. Canalicemos estas críticas a través de las autoridades médicas pertinentes y evitemos el poner nuestro buen nombre en entredicho ante la opinión pública.

El médico debe demostrar interés en el bienestar general de sus conciudadanos compenetrándose con los propósitos y las esperanzas del pueblo. Debe él mostrar genuino interés en las actividades de la comunidad sirviendo a la misma en forma activa y positiva. El médico debe darse a conocer no sólo como sanador de cuerpos, si no también como colaborador en todas las actividades de aspecto comunal donde pueda trabajar hombro a hombro, junto a los otros miembros de la sociedad. Esto requiere sacrificio, tacto y devoción. Implica el codearse con sus semejantes, no como de médico a paciente, no como de un profesional a un lego, si no como de ciudadano a ciudadano. La clase médica no puede ganarse los amigos por millares mediante campañas de promoción o de relaciones públicas; nuestros amigos los haremos a costa de ardua, sincera y desinteresada labor; los haremos uno a uno, en nuestros consultorios, como miembro de un comité cívico, como promotor de una campaña comunal, como cooperador en empresas religiosas, como participante en actividades políticas, como originador de campañas pro seguridad o como dirigente de movimientos culturales. Pero no esperemos ocupar el sitio de máxima distinción en cada una de esas actividades; tendremos que compartir la dirección con



grupos de ciudadanos de grandes méritos. La sociedad moderna está estructurada en tal forma que además del médico, el juez, el maestro, el farmacéutico y el sacerdote de antaño, hoy encontramos una pléyade de profesionales de reconocido empuje y vasta preparación, tales como banqueros, industriales, jefes obreros, ingenieros y trabajadores sociales, profesionales que ayer no existían o que no se habían constituido en posibles dirigentes de nuestra sociedad.

El médico generalmente responde de una manera negativa en cuanto a la política se refiere. Sólo se interesa en los asuntos del gobierno cuando se entera de algún proyecto que aparenta amenazar su status quo personal o profesional. Si nosotros los médicos eludimos nuestros deberes ciudadanos, si no nos mantenemos informados sobre la cosa pública, si no le comunicamos nuestros deseos a nuestros servidores en los distintos niveles del gobierno, decididamente sólo podremos culparnos a nosotros mismos cuando los sucesos se desarrollen en contra de nuestros intereses y nuestra filosofía.

La medicina es una noble vocación. El médico no le hace justicia a su profesión cuando no se comporta en forma noble. "¿Cómo pretende él exaltar el espíritu de alguien cuyo espíritu tiene un grado de exaltación mayor que el suyo?" (James Bryan)

El más grande elogio que se le hace a la profesión médica está implicado en la actitud intransigente de los demás en cuanto al comportamiento del médico se refiere. De ahí la indignación que sienten muchos ante las situaciones en que se ponen en duda el honor y el espíritu de sacrificio de un médico. Ya que el médico goza del doble privilegio de sondear la mente y de poder posar sus manos sobre el cuerpo humano, se espera de él lo más alto y perfecto en servicios: caridad cristiana para el espíritu y salud para el cuerpo. Si defraudamos a los que servimos con un comportamiento falto de caridad aunque repleto de ciencia, con toda seguridad que bien pronto se nos hará descender del pináculo de distinción en que fuimos entronizados. Inspiremos nuestras actuaciones en la caridad y resumamos con las palabras de San Pablo a los Corintios: "Si hablare las lenguas de los hombres y de los ángeles, más no tuviera caridad, no sería si no cual bronce resonante o címbalo estruendoso. Y si poseyere la profecía y conociera todos los misterios y toda la ciencia, y si tuviera toda la fe hasta trasladar montañas, mas no tuviera caridad, nada sería. Y si repartiera todos mis haberes materiales y si sacrificara mi cuerpo para ser abrasado, mas no tuviera caridad, ningún provecho sacaría."



## UROLOGY IN PUERTO RICO, PAST AND PRESENT

LUIS A. SANJURJO, M.D.\*

The opportunity of addressing this distinguished audience tonight is a great honor for two reasons. First, because it is a privilege to be President of the Puerto Rico Urological Association; and second, it affords the opportunity to narrate, although in a very incomplete fashion, the birth and evolution of this society, give due credit to the accomplishments of its members and acknowledge their contribution to the medical progress of the island.

History is one of the main and most important sources of knowledge, and its study helps us to achieve a better understanding of all aspects of life. It is for this reason that this address deals with the history of the Puerto Rico Urological Association, as it would be impossible to understand the progress of Puerto Rican urology without knowing some of its historical background.

During the summer of 1949, one of the most distinguished urologists in the United States, a man whose reputation and prestige have gone beyond geographical barriers, and who, because of his scientific achievements as an urologist, teacher and organizer, has received almost all the honors that can be bestowed upon a physician, spent a short vacation in Puerto Rico. I am referring to Dr. Charles C. Higgins, then President of the American Urological Association. It is to Dr. Higgin's credit and honor that he suggested to us and took an active part in the organization of an urological society in Puerto Rico. This most happy event took place one evening after one of his lectures at the Puerto Rico Medical Association.

At the beginning, the possibility of creating this Association did not seem possible because of the limited number of urologists practicing on the island. But with his perseverance, suggestions and advice, based on his wide knowledge and experience, Dr. Higgins convinced those urologists present not only of the feasibility of having the urologists organize this association, but of the necessity of so doing. Very promptly thereafter the idea was accepted, and immediately after his departure an outline of the regulations and by-laws was prepared.

On the morning of September 2, 1949, one month after Dr. Higgin's visit, an unofficial meeting was held by eight Puerto Rican urologists for the purpose of organizing the Puerto Rico Urological Association, and on this date the society was officially

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\* Read at the Eighth Annual Meeting of the Puerto Rico Urological Association.

From the Department of Surgery, Section of Urology, School of Medicine, University of Puerto Rico.

founded. The first Board of Directors was elected, and Dr. Esteban García Cabrera was chosen as our first President.

The Puerto Rico Urological Association was the first society of specialists to be organized on the island. Later on, physicians practicing other specialties founded similar societies. Sections of various medical specialties were created by the Puerto Rico Medical Association before and after our Association was officially organized.

In less than a year a small group of enthusiastic and determined men realized what had seemed impossible namely, the founding of this scientific society, preparation of regulations and by-laws, and the celebration of our first Annual Meeting in July 1950.

Four distinguished urologists were invited to this meeting: Dr. Thomas D. Moore and Dr. Charles C. Higgins, President and Past-President of the American Urological Association, respectively, and Doctors Harold P. MacDonald and Russell B. Carson, President and Secretary of the Southeastern Branch of the American Urological Association.

At the end of this first meeting membership certificates were issued to all the members of the Puerto Rico Urological Association and Doctors Moore and Higgins were awarded honorary memberships.

Since the first annual meeting, twenty-one world renowned exponents of American urology have attended our meetings and participated in our programs. Six of these fellow urologists have been made honorary members.

Their friendship and the teaching conveyed to us have fostered the best personal and scientific relations, and their example has been an inspiration to every member of this Association who endeavors and strives unselfishly towards improving and maintaining the highest standards of the practice of urology on the island.

But the activities of this small society have not remained stagnant and limited to holding monthly or yearly meetings. Some of our members have attended national and international urological congresses in France, Athens, Mexico, Madrid and the United States to participate in the scientific program and represent, in one way or another, our society and the Puerto Rican medical profession.

During the Fifth Inter-American Urological Congress in Mexico City, an invitation was extended to one of our members to form a local chapter of the International Urological Association. The plans that were laid down at this meeting with Professor Gouverneur of Paris were crystalized the next year at the New York meeting of the International Urological Association, when



one of our members was appointed delegate for Puerto Rico and the final arrangements were made to organize a Puerto Rican delegation to the International Urological Association meeting in Athens in 1955. This was successfully carried out during the meeting in Greece, and a Puerto Rican unit of the International Urological Association, to which five of our members belong, was created.

It is also of interest to mention that by the end of 1946 the first attempts were made to organize a local chapter of the American College of Surgeons. We can state with pride that during the initial talks, in which nine fellows of the College participated, three were urologists who later on helped to organize this Association.

An analysis of the current status of the practice of urology in various countries of the world reveals that in some places this specialty is practiced exclusively by general surgeons who have had little or no formal urological training, and who have neither space nor adequate urological facilities in their hospitals.

In many countries teaching programs are lacking and those physicians desiring to become full-time urologists or to devote some of their practice to the specialty must seek the teaching facilities at other medical centers. In other places the teaching of urology is exclusively conducted on a proctorship basis without a specific or formal length of training, a practice that is not comparable to the standards of teaching of this specialty in the United States and Puerto Rico.

For many years the new urological concepts developing in the United States and Europe were brought to the island by the few practicing urologists in the late twenties and mid-thirties, but the lack of certain facilities compelled these men to work with many handicaps. It was not until the last decade and a half that the teaching of this specialty was developed on the island.

The first attempts to organize an urological training center was begun during the last war at the Rodríguez General Hospital, where several Puerto Rican and American Army medical officers received a short but comprehensive and practical urological training which permitted their being assigned later on to urological sections at other medical installations on the home front and in war zones.

Some members of the Puerto Rico Urological Association also played a leading role in organizing and securing approval of the first formal residency training program in urology in Puerto Rico. Since July 1950 when the first resident began his training, four Puerto Rican physicians have received or are receiving urological training at the San Juan City Hospital in a program that has



been fully approved by the American Board of Urology and the American Medical Association. Applications for training have been received from Santo Domingo, Egypt, Germany and the United States, but the limitation of vacancies does not permit the establishment of an exchange of students.

The interest of most of our members have also extended into undergraduate teaching. During the early phases of the planning of the School of Medicine of the University of Puerto Rico the contribution by some of the members of this Association was an active one, and at the present time most of them participate in the teaching program of our very young but splendid Medical School, which is well known and recognized on the island and abroad.

The urology teaching program at the School of Medicine compares favorably with that of many schools in the United States, mainly because of the way in which our program is organized and the interest of the professorial staff. Individual attention is given to the students who are assigned to the service in groups of three or four for a period of one month. They receive an average of fourteen to seventeen hours of urological teaching a week under the direct supervision of an attending. The Pediatric Department of the School of Medicine, aware of the importance of urological problems in their specialty, sends a group of their students to the Pediatric-Urology Clinic of the San Juan City Hospital. The support received from the Department of Pediatrics has been splendid.

These accomplishments represent the progress of urology in Puerto Rico — progress similar to that of other branches of medicine. However, we are not yet satisfied, as much more has to be done and many more things accomplished. Knowledge and teaching are dynamic and thus have no end, and although the members of this association have marked a turning point in the practice of urology on this island and are undoubtedly the first exponents here of the teaching of urology, the tasks that lie ahead are many and difficult.

It is with great pride and pleasure that this short history of the Puerto Rico Urological Association is presented. The honor and credit for its existence and the accomplishments belong to each and every one of its members who, since the founding of its organization, have magnificently contributed with their valuable time, money and ideas — and in an excellent spirit — to develop, raise and maintain the standards of urology on the island at the highest possible level, fostering also the teaching of this specialty to undergraduate and graduate students.

We firmly believe that each one of the members of the Puerto Rico Urological Association has been inspired by a sense of duty worthy of praise, but that their doings have been directed by a Superior Being, Our Mighty God, because what has been done would have been impossible without His help.

In closing, I am reminded of one of the personal prayers of a great soldier, one of the best commanders of all times, who was well known not only for his ruthless discipline but also for his kindheartedness toward his fellow men and his devotion to God, the late General George S. Patton, Commander of the United States Third Army during the last World War, who before engaging his friends in his favorite polo games, leading his soldiers into battle, or in his daily communion with God always prayed and often said, "Oh, God, please permit that I always try to do my best".

This is an appropriate occasion to request from the future members of this Association, the medical students, and residents in urology of our Association, School of Medicine and hospitals to always keep present in their minds General Patton's prayer, for it is upon them that will be entrusted the direction and guidance of our future medical students, interns and residents. They are the ones who will be in charge of developing new teaching and research programs, and conducting the destiny of this Association. To them we leave the heritage of our small society, hoping that in the years to come its membership will increase. We beg of them to maintain the present standards at the high peak of scientific value that has been attained during the last eight years.

The founders of this Association laid the solid foundations for the practice and teaching of good urology on the island, and we hope and expect from the newcomers, that they will follow the footsteps of their predecessors, and when their time comes also to retire, that the fine example of so few be a golden page to be emulated by the young students of our specialty.

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<sup>3</sup> Harris, O. J., et al. Whole Defatted Pancreatic Substance in The Treatment of Psoriasis, *Brit. Lancet*, 72:7 p. 328-330 (July 1952).

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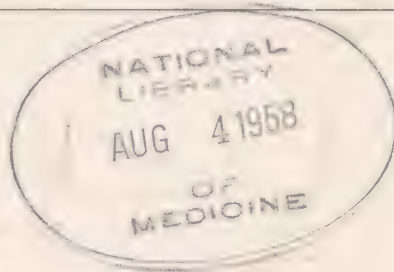
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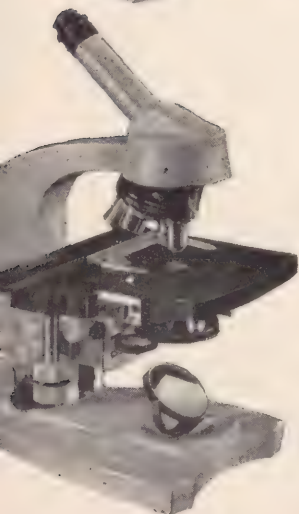
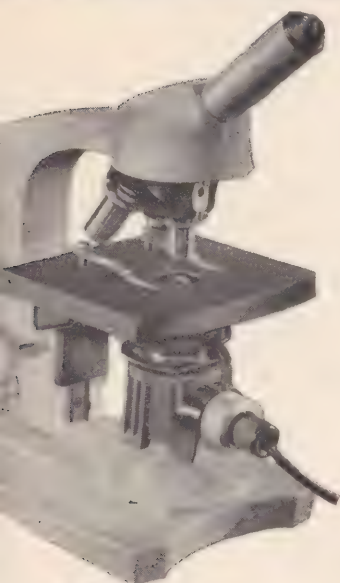
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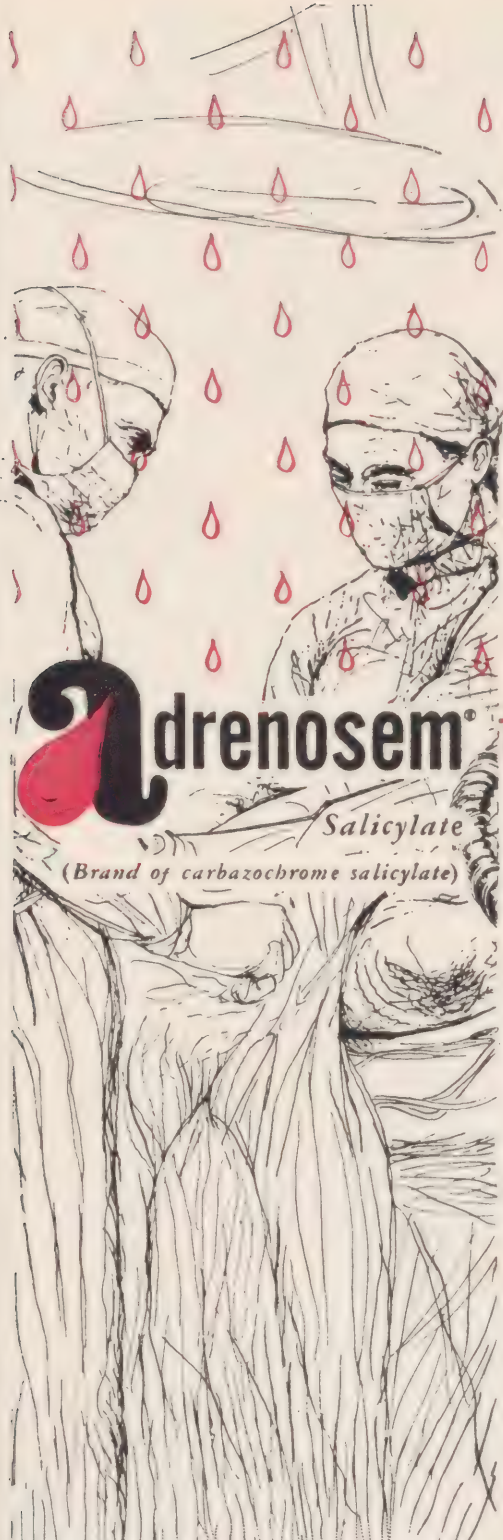
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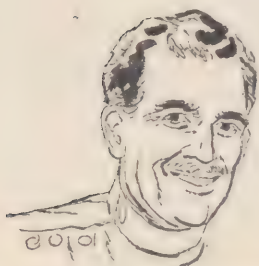
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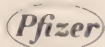
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# BOLETIN

DE LA ASOCIACION MEDICA DE PUERTO RICO

VOL. 49

SEPTIEMBRE, 1957

NO. 9

## CARDIAC DYSFUNCTION IN THYROID DISEASE\*

AGUSTIN M. DE ANDINO JR., M.D.

and

ROBERTO RODRIGUEZ, M.D.

The abnormalities in hormonal production by the thyroid gland tend to affect the entire organism and the heart is no exception to this effect. An increased production of thyroid hormone gives rise to an increased oxygen need by the body cells which is compensated by an increase in cardiac output with its concomitant augmentation in blood flood. Clinically, thyroxin also produces an increased instability of the myocardium which is manifested as palpitations and tachycardia.

The patients who exhibit thyrotoxicosis complicated with heart disease have been called thyrocardiacs and have been classified under the term "thyrotoxic heart disease." Some investigators have maintained that hyperthyroidism is the only etiological factor observed in some cases of this type of heart disease, but most cardiologists believe that the role of an overactive thyroid in the precipitation of heart disease is a secondary one, the hyperthyroid state just aggravating previously existing organic heart disease.<sup>2,3,6</sup>

Functional murmurs are present in the great majority of cases with hyperthyroidism. They are invariably systolic in type and are found very frequently at the pulmonic and apical areas. Sinus tachycardia is found in almost all the cases of this disease, but a normal heart rate or even a sinus tachycardia has been reported in the so called "masked thyrocardiacs." Premature auricular contractions and or auricular fibrillation have been reported to occur in between 20 to 50% of the cases in the different series reported (as quoted by Friedberg<sup>6</sup>). The Wolff-Parkinson-White syndrome has

From the Department of Medicine, School of Medicine, University of Puerto Rico and the Department of Medicine and Endocrine Clinic, San Juan City Hospital, San Juan, P. R.

\* Presented at the Annual Meeting of the Puerto Rico Medical Association, December 14, 1955.

also been reported in conjunction with the hyperthyroid state. This condition has disappeared upon return of the euthyroid state (as quoted<sup>8</sup>).

In contrast with the hyperthyroid state, hypothyroidism has to progress to the stage of myxedema before cardiac complications develop.<sup>7</sup> Congestive heart failure, cardiac enlargement, pericardial effusion and angina pectoris have been frequently described as complications of the myxedema state. Angina pectoris can be aggravated when replacement therapy is given without the proper adjustment and control. The electrocardiogram is quite characteristic and usually reveals low voltage of all components or flattening of T-waves.<sup>9</sup>

It is usually easy to diagnose the presence of hypothyroidism in a patient with heart disease as the myxedema state becomes quite apparent even prior to the onset of cardiac symptomatology. On the other hand, in the older patient with hyperthyroidism, the hypermetabolic state may go undetected and unless the physician exhibits a high index of suspicion it may go undiagnosed. This has been found to be an important factor in the etiology of the syndrome of intractable heart failure.

#### MATERIALS AND METHODS

In this paper we wish to present our observations over a period of four years (1951-1955) in a group of 122 patients suffering from thyroid dysfunction who were studied and treated in the Medical Wards and in the Endocrine Clinic of the San Juan City Hospital. The methods used for the diagnosis of thyroid disease included the clinical observation of the patients, the determination of the basal metabolic rate, the total serum cholesterol and the 24-hours radioactive iodine uptake. In the evaluation of cardiac function we utilized the study of the venous pressure, the circulation time, the radiographic study of the chest and the 12-lead electrocardiogram.

Of the 122 patients studied we found 68 patients who were suffering from hyperthyroidism and 54 patients suffering from hypothyroidism. The hyperthyroid group was subdivided according to sex into 57 females and 11 males for a ratio of 5.7 to 1.0. In the hypothyroid group we found 50 females and 4 males yielding a ratio of 12 to 1. In this same group there were 27 patients who had reached the severe degree of hypothyroidism characterized by myxedema. The ratio of females to males in the myxedema group was calculated to be 9 to 1. Only cases of primary hypothyroidism, either idiopathic or postoperative, were included in this



study. In the entire group of patients cardiac dysfunction was found to be present in 21 cases.

Our criteria for the inclusion of patients in the cardiac dysfunction group included the following: cardiac enlargement, cardiac failure, cardiac arrhythmias or evidence of coronary artery disease either on clinical grounds or by electrocardiographic study. Sinus tachycardia or sinus bradycardia was not considered evidence of cardiac dysfunction since most of our patients with hyperthyroidism exhibited a rapid pulse rate and the contrary was found in most of our patients with uncomplicated hypothyroidism.

RESULTS

A. Hyperthyroid Group

In the hyperthyroid group we found 11 patients to be suffering from cardiac disease. The age of these patients ranged from 77 to 23 years with an average of 40.9 years. There were 9 females and 2 males with a ratio of 4.5:1.0 which approximates

TABLE I: RELATIONSHIP OF CARDIAC DYSFUNCTION TO AGE, SEX AND DURATION OF DISEASE

Patient	Age	Sex	Duration of Disease in Years	Cardiac Dysfunction	Cardiac Functional Classification
1. R.R.	70	F	1.00	A.F., C.H.C.	IV E
2. G.M.R.	58	M	.75	P.A.F., A.P.	IV E
3. P.R.C.	56	M	.60	A.C.I.	IV E
4. J.R.	55	F	30.00	P.A.C.	I A
5. A.C.	51	F	5.00	C.H.A., A.F.	III D
6. T.H.	50	F	2.00	C.H.F.	IV E
7. B.S.	40	F	22.00	P.A.C.	II C
8. A.B.C.	39	F	4.00	C.H.F.	III D
9. T.D.J.	35	F	2.00	C.H.F., G.R.	III E
10. S.M.	28	F	8.00	G.R., C.H.F.	II C
11. G.E.F.	23	F	3.00	G.R.	I A
Average	40.0 years	M - 2 F - 9 4.5:1	7.12 years		

Key

- A.P. — Angina Pectoris

G.R. — Gallop Rhythm

A.C.I. — Acute Coronary Insuff.

P.A.F. — Paroxysmal Auricular Fibrillation

M. — Male
- C.H.F. — Congestive Heart Failure

A.F. — Auricular Fibrillation

P.A.C. — Premature Auricular Contraction

F, — Female

very closely the sex ratio of the entire hyperthyroid population of our Clinic. The duration of the disease state among the "cardiacs" ranged from 30 years to 8 months with an average duration of 7.1 years. In the male patients the average duration of the disease was slightly shorter (7 months) and the average age was higher (57 years). There were seven patients in this group who went into cardiac failure. All of these patients were females. Of the seven patients with cardiac failure five of them exhibited evidence of cardiac arrhythmias, three with auricular fibrillation and two with premature auricular contractions. Two other patients developed coronary artery disease without evidence of congestive heart failure. One was suffering from angina pectoris with electrocardiographic evidence of chronic coronary artery disease and the other one suffered an acute myocardial infarction. It is interesting to note that both of these patients were males.

Table II illustrates the laboratory findings in the thyrocardiac patients and attempts to establish a relationship between the type of goiter and the severity of the hypermetabolic state or of the cardiac dysfunctions. No such relationship could be established from our studies. The laboratory data revealed that the basal metabolic rates ranged from + 88% to + 19% with an average

TABLE II: LABORATORY FINDINGS IN THYROCARDIACS

Patient	Goiter	B.M.R.	I <sub>131</sub>	E. C. G.	X-Ray of Chest
1. R.R.	Diff.	+ 35	63.5%	L. V. H.	Concentric C. E.
2. G.M.V.	Diff.	+ 38	77.9%	Inverted T waves on V <sub>4</sub> , V <sub>5</sub> , V <sub>6</sub> , A.F.	Normal
3. P.R.C.	Nodular	---	77%	Inverted T waves on V <sub>4</sub> , V <sub>5</sub> , V <sub>6</sub>	Normal
4. J.R.	Diff.	+ 88	68%	P. A. C.	Normal
5. A.C.	Nodular	+ 41	88%	L. V. H., Inverted T waves on V <sub>5</sub> , V <sub>6</sub>	Rt. P. E., C. E.
6. T.H.	Diff.	+ 53	96%	L. V. H.	Lt. P. E., C. E.
7. B.S.	Diff.	+ 38	85%	P. A. C.	B. L. H.
8. A.B.C.	Diff.	+ 64	---	L. V. H.	C.E., Prominent Pulm. Art.
9. T.D.J.	Diff.	+ 53	---		Rt. P. E., C. E.
10. S.M.	Diff.	+ 34	76.5%	Normal	B. L. H.
11. G.E.F.	Nodular	+ 19	---	Normal	Normal

Key: L. V. H. — Left ventricular hypertrophy  
P. A. C. — Premature Auricular Contractions  
P. E. — Pleural Effusion  
C. E. — Cardiac Enlargement  
A. F. — Auricular Fibrillation

of + 46.3%. The radioiodine uptake studies varied from 63% to 96% with an average for the group of 70%. The electrocardiographic studies, as shown in Table II, included changes characteristic of coronary artery disease, left ventricular hypertrophy, auricular fibrillation and premature auricular contractions. Two patients had borderline heart size and in four cases the cardiac outline was within the limits of normal. Pleural effusions were found in three patients, all being secondary to cardiac failure.

The therapeutic plan in this group of thyrocardiac patients included the use of antithyroid drugs initially, followed by the use of radioactive iodine as definitive treatment. Surgery as definitive treatment was only used in one young patient whose cardiac arrhythmia disappeared under Tapazole therapy. Five patients have already received radioiodine in doses ranging from 3 mc to 24 mc. All of these with the exception of one have been rendered euthyroid. Of the remaining six patients five have been rendered euthyroid under the action of Tapazole; the other one exhibited a very poor response to Tapazole and had to be changed to propylthiouracil therapy. This patient has been lost in our follow-up.

TABLE III: TYPE OF THERAPY IN THE THYROCARDIAC AND RESPONSE

Patient	Therapy	Thyroid State	Functional Class. (Pre-treat.)	Functional Class. (Post-treat.)
1. R.R.	I <sub>131</sub>	Euthyroid	IV E	I A
2. G.M.V.	I <sub>131</sub>	Euthyroid	III D	I B
3. P.R.C.	Tapazole Propylthiouracil	Thyrototoxic	III E	II B
4. J.R.	Tapazole	Euthyroid	I A	I A
5. A.C.	Tapazole-I <sub>131</sub>	Euthyroid	IV E	II C
6. T.H.	I <sub>131</sub>	Euthyroid	IV E	II B
7. B.S.	Tapazole-I <sub>131</sub>	Thyrototoxic	II C	II C
8. A.B.C.	Tapazole	Euthyroid	III E	I A
9. T.D.J.	Tapazole	Euthyroid	III E	II C
10. S.M.	Tapazole	Euthyroid	I A	I A
11. G.E.F.	Tapazole + Surgery	Euthyroid	I A	I A

## B. Hypothyroid Group

In the hypothyroid group we found 10 patients suffering from cardiac disease. All of these cardiac patients exhibited evidence of severe thyroid deficiency, i. e. myxedema. The age in this



group of patients ranged from 68 to 33 years with an average of 55.0 years. The duration of the myxedema state varied from 37.0 years to 4 months with an average value of 5.8 years. The sex ratio was determined to be 9 females to 1 male, this being quite similar to the ratio for the whole hypothyroid group. Six of the patients with cardiac dysfunction developed congestive heart failure and five exhibited evidence of angina pectoris.

TABLE IV: RELATIONSHIP OF MYXEDEMA WITH CARDIAC DYSFUNCTION WITH AGE, SEX AND DURATION OF DISEASE

Patient	Age	Duration in Years	Functional Classification	Angina Pectoris
1. P.V.M.	68	Immediate Post-op.	III C	No
2. J.B.D.	66	1.00	II C	Yes
3. M.S.	63	37.00	III D	No
4. N.S.	60	3.00	II C	No
5. P.G.B.	59	10.00	II C	No
6. R.D.T.	56	1.00	I B	No
7. R.D.S.	54	.33	III C	Yes
8. M.R.D.	53	5.00	II C	Yes
9. D.J.S.	38	.50	II C	Yes
10. J.R.J.	33	.50	II C	Yes
Average	55.0	9.1		50%

The etiological factors in the myxedema state are illustrated in Table V. In four cases the disease was secondary to surgical removal of thyroid tissue; in the other six cases the thyroidal failure was of the idiopathic variety. The basal metabolic rates varied from  $-67\%$  (which we feel is most probably a laboratory error) and  $-20\%$  with an average of  $-34\%$ . The radioiodine uptake values ranged from  $8\%$  to  $20\%$  with an average of  $13\%$ . The serum cholesterol determinations showed a maximal value of 500 mgm. %, a minimal value of 125 mgm. % and an average value of 291 mgm. %. This average is considerably lower than what might be expected for a similar group in the continental United States. We believe that the poor nutritional status of our group of patients adequately explains this interesting finding. The electrocardiographic findings revealed the characteristic low voltage and non-specific T-wave changes which have been found to be associated with this disease. A left bundle branch block and premature ventricular contractions were additional findings of interest. The radiographic studies of the chest showed cardiomega-

ly in all cases but one. In one of the cases studied there was a pericardial effusion present in addition to the cardiomegaly.

TABLE V: LABORATORY FINDINGS IN MYXEDEMA HEART DISEASE

Patient	Etiology	B.M.R. (%)	Serum Cholesterol	I <sub>131</sub>	X-Ray	E.C.G.
1. P.U.M.	Post Op.	— 42	250 mg %	----	(L.V.H.) (C.A.)	T waves changes
2. J.B.D.	Idiopathic	— 32	337 mg %	----	(L.V.H.) (C.A.)	L. Volt
3. M.S.	Post Op.	— 67	125 mg %	----	C.E.	L.B.B.B.
4. N.S.	Idiopathic	— 40	356 mg %	20%	C.E.	L. Volt
5. P.G.B.	Idiopathic	— 35	280 mg %	15%	C.E.	L. Volt
6. R.D.T.	Idiopathic	— 35	500 mg %	----	C.E., C.A.	L. Volt
7. R.D.S.	Idiopathic	----	-----	12%	Normal	-----
8. M.R.D.	Post Op.	— 20	256 mg %	----	L.V.H.	P.V.B.
9. D.J.S.	Post Op.	— 29	293 mg %	8%	P.E.	L.V.H.
10. J.R.J.	Idiopathic	— 32	225 mg %	10%	C.E.	L.V.H.
Average	-----	—34.0	291.1 mg %	13%	-----	-----

## Key

L.V.H. — Left ventricular hypertrophy    L.B.B.B. — Left bundle branch  
 C.E. — Cardiac enlargement    L. Volt — Low voltage  
 P.E. — Pericardial effusion    P.V.B. — Premature ventricular beats  
 C.A. — Calcific Aorta

TABLE VI: RESPONSE TO THERAPY IN THE "MYXEDEMA HEART" PATIENT

Patient	Thyroid State	Functional Classification Pre-treat.	Functional Classification Post-treat.
1. P.U.M.	Euthyroid	III C	I A
2. J.B.D.	"	II C	I B
3. M.S.	"	III D	I B
4. N.S.	"	II C	I A
5. P.G.B.	"	II C	I A
6. R.D.T.	"	I B	I A
7. R.D.S.	"	III C	II B
8. M.R.D.	"	II C	I A
9. D.J.S.	Hypothyroid	II C	II B
10. J.R.J.	Euthyroid	II C	I A

All cases were treated with thyroid extract, starting with very small doses (gr.  $\frac{1}{8}$ ) and increasing the amount to tolerance.

Case 6 developed acute congestive failure after being given gr.  $\frac{1}{4}$  of the extract for only three days. This case illustrates quite well one of the dangers of thyroid therapy in the management of the myxedematous state, the precipitation of cardiac failure. Case  $\pm 9$  showed marked aggravation of anginal symptoms while under gr.  $\frac{3}{8}$  of thyroid extract; because of this complication we have not been able to achieve the euthyroid status in this patient.

Table VII illustrates the breakdown of our cases of cardiac disease in thyroid dysfunction.

TABLE VII: TOTAL CASES OF "CARDIACS" IN THYROID DYSFUNCTION

	Total	Heart Disease	Congestive Heart Failure	Arrhythmias	Coronary Insufficiency
Thyrotoxicosis	68	11 (16%) Males - 2 Females - 9 4.5:1	7 (63%)	5 (46%)	2 (18%)
Hypothyroidism	54	10 (18%) Males - 1 Females - 9 9:1	6 (60%)	2 (20%)	5 (50%)

#### DISCUSSION

The cases discussed in this publication are nothing else but human experiments which exemplify very vividly the natural history of the disturbances in cardiac function which result from overfeeding thyroxin or from withdrawing thyroxin from man. The end result of this experience might be manifested in a variety of clinical pictures depending upon the previous state of the myocardium, the age of the patient, the sex and the duration of the abnormality in thyroid function. On the one side of the scale we have been introduced to those cases who illustrate the effects of an overactive thyroid gland; on the other side we also see how dysfunction of the heart might be in an integral part of the myxedematous state.

The primary result of an overactive thyroid gland is the augmented metabolism with an increased expenditure of energy and a corresponding rise in the amount of heat produced. In the process of elimination of this extra amount of heat the circulatory apparatus responds by 1) an increase in peripheral blood flow which is directly proportional to the increase in basal metabolism. 2) an increase in blood volume associated with an increment in the volume of extracellular fluid and, 3) an increase in cardiac rate



and output per minute. We owe it to Keeton<sup>14</sup> to call attention to the fact that the increase in cardiac output which is seen in hyperthyroidism is greater at the same oxygen consumption than it is in work. He has stressed the point, already emphasized by others, that the hyperthyroid heart is hyper-reactive and that there are other factors operating besides the demand for the transport of extra heat.

The nature of these "other factors" has arisen the interest of various investigators. The mechanisms which deserve special attention are the neuroadrenal ones. It is a proven fact that the sensibility of the adrenergic accelerator fibers to the heart is markedly increased by an excess of thyroid hormone, thus augmenting the response to be expected from the increase in circulating thyroxine. Raab<sup>15</sup> has approached this problem from a different viewpoint. He has shown that an increased production of epinephrine or epinephrine-like substances (catechols) will produce myocardial hypertrophy and dilatation associated with arrhythmias and myocardial degeneration. These disturbances can be markedly accelerated by the administration of thyroxine. It therefore seems quite probable that the hyperactivity of the heart in hyperthyroidism is caused in part by the interaction between the thyroid and the adrenal gland.

While the excessive production of thyroxine in this disease is adding to the burden which the heart must carry, undernutrition is decreasing its capacity for work. Many years ago Plummer and Boothby<sup>16</sup> showed that the cost of doing work is much greater in the hyperthyroid than in the normal subject. Keeton<sup>17</sup> has calculated that a subject with severe thyrotoxicosis may have an expenditure of energy equal to 6000 or 7000 calories. Thus, unless the patient is very carefully instructed and his diet very carefully planned, the patient's inadequate intake will eventually lead to semistarvation. This state of starvation will eventually lead to: 1) negative nitrogen balance with an increased creatine excretion, 2) depletion of the glycogen stores of the cardiac muscle, 3) antiaminoses, especially Vit. B-1 deficiency and 4) a relative ischemia caused directly or indirectly by the increased cardiac activity in association with the lack of readily available glycogen.

In summary, it may be said that the tremendously increased physiological load placed upon the heart in thyrotoxicosis and the relative undernutrition present result in a variety of functional disturbances which disappear completely when the toxic state is well controlled. However, if the stresses are sufficiently long continued and the cardiovascular tree has been previously involved, irreparable myocardial damage and cardiac failure will ensue. Both these points have been well illustrated in our series of patients.

Dysfunction of the heart appears to be a part of the myxedematous state. The longer the duration of the disease and the older the patient, the more diffuse and permanent the damage. As a rule, myxedematous patients tire very easily. Cardiac pain is a very frequent complaint, as was seen in 50% of our patients. In fact, these symptoms and others pointing to cardiac impairment may so dominate the picture that the patient is often treated as a sufferer from heart disease only.

The changes in the heart in myxedema include cardiac enlargement, both to the right and the left, and diffuse coronary sclerosis, resulting in bradycardia with a shortening of the pulse pressure and alterations in the electrocardiogram. The reason for the cardiac enlargement is not too well understood. Most authorities are agreed on the point that the infiltration by myxedematous tissue is not alone responsible, and according to Boyd<sup>13</sup> it seems as if such infiltration has been rarely proved. Pericardial effusion as a cause of the enlargement has been found in some cases. In our experience this has been quite a rare occurrence, having been found in only one of our cases. We **certainly do not agree** with the recent report by Kern and his group<sup>14</sup> which tends to ascribe the cardiomegaly of myxedema to effusion into the pericardial sac.

LaDue in 1943 critically analyzed the nature of the enlargement in the heart in a case of "myxedema heart." The microscopic lesions in his case were indistinguishable from those seen in several other conditions, but therapeutically the changes in cardiac function responded specifically to hormone therapy alone. These changes include hydropic vacuolization, loss of striation, branching, pyknotic nuclei and irregularity in the staining properties of the muscle fibrils. These changes were associated with a hydropic edema similar to that noted in other tissues in the myxedematous patient, and to which the other cardiac alterations were believed to be due.

Another factor of importance in the pathogenesis of myxedema heart disease are the disturbances in the nutrition of the cardiac musculature. These disturbances may be attributed to one or more of several influences. In the first place the lack of thyroid hormone interferes with the activity of each individual cell and with the utilization of the necessary nutrients. In the second place, the metabolic alterations in myxedema, particularly those concerned with lipid metabolism, favor the deposition of cholesterol and calcium salts in the coronary arteries, thus removing the channels thru which blood reaches the cardiac musculature. In the third place, the diminished activity of the adrenal cortex and the liver combine to make carbohydrate less readily available to the

cardiac muscle cell. All this factors put together contribute to the state of undernutrition in which the heart finds itself.

In summary, and in contradistinction to the hyperthyroid state in which a variety of factors has to be considered, it must be emphasized that disturbances in the cardiac functions are an integral part of the clinical picture of the myxedema state. In these individuals lowered tonus of the cardiac musculature and feebleness of cardiac action stand predominantly in the foreground. Thus the changes in the pulse rate, blood pressure, capillary permeability, size of the heart and electrocardiogram must be looked upon as a true part of the hypothyroid state and not as a separate disease process complicating the thyroid disturbance.

#### CONCLUSION

1. We have presented our observations in a group of 122 patients suffering from thyroid dysfunction which have been followed in the Endocrine Clinic of the San Juan City Hospital over a period of four years (1951-1955).

2. In this group 68 were found to be hyperthyroids and 54 to be hypothyroids. In the hypothyroid group 27 were found to be suffering from myxedema.

3. In the hyperthyroid group there were 11 patients with abnormal cardiac function. These included 7 patients with congestive heart failure, 5 with cardiac arrhythmias and 2 with coronary artery disease.

4. In the myxedema group there were 10 patients with cardiac disease. These included 6 patients with congestive heart failure, 2 with cardiac arrhythmias and 5 with coronary artery disease characterized by angina pectoris.

5. All of our hyperthyroid patients showed marked improvement of their cardiac status after the toxic state was controlled.

6. All of our myxedema patients showed improvement of their cardiac status on thyroid therapy. In one case achievement of the euthyroid state has not been attained because of aggravation of angina pectoris with a gradual increase in the dose of thyroid extract.

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## THE TREATMENT OF THE THORACOTOMIZED PATIENT\*

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The old challenge, prevention of anatomical distortions of the spine and chest, resulting from thoracic surgery, is no longer encountered in modern tuberculosis hospitals. This is due, primarily, to the change in thoracic surgery procedures, from radical thoracoplasty to collapse pulmonary tissue permanently to conservative thoracotomy for removal of infected segments of lung, localized by the miracle of antibiotics and chemotherapy. This is the result of improved diagnostic methods of the chest physician and the radiologist. This can be attributed to the blessing of modern anesthesia and the greater operating skill of the chest surgeon. This follows in logical sequence early diagnosis and prompt and adequate bed rest in well-equipped hospitals. This is due, also, to the acceptance of a rehabilitation program to promote the well-being and healing of the tuberculous patient.

My discussion today will be limited to the physical methods for preventing deformity in the postoperative stage of thoracotomized patients.

The surgical incision traumatizes the lower trapezius, rhomboids, latissimus dorsi, serratus anterior and the intercostal muscles. This group of muscles is connected intimately with scapular motion. Disuse of these muscles, secondary to myositis and postoperative pain, can result only in limitation of shoulder movements; and, if left untreated, in a frozen shoulder. Similarly, limitation of chest expansion is a natural complication following atrophy and weakness of the intercostal and serratus anterior muscles and splinting of respiration to avoid muscular and pleural pain. Unless these muscles are mobilized, they produce lasting postural defects that tend to belittle the importance of necessary surgery in the patients' minds.

These deformities will remain, long after the disease has become arrested, to plague both the surgeon and the patient. Usually, patients will refuse corrective surgery if there is a "deformed" guest in the hospital. This has certainly not been a problem at Clínica Fernández García since the organization of the Physical Medicine Rehabilitation Service.

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The role of Physical Medicine is to prevent deformities by restoring the body to a normal or nearly normal anatomical state possible. This is done by prescribing correct bed posture, adequate exercises for the extremities and chest wall and proper breathing and posture exercises during the pre and postoperative periods.

### **Preoperative Therapy**

The physiatrist should contact the patient at least a week before surgery in order to assure him that he will not become permanently disfigured and instruct him in the procedures that will prevent deformities. These include proper bed posture; exercises to mobilize and strengthen the shoulder muscles and chest wall; and, breathing exercises to prevent intercostal muscle contracture, expand the remaining lung tissue to fill the chest cavity and promote deep and even breathing. The surgeons are not always cognizant of the great value of this preoperative orientation of the patient, and many times they forget to refer the patients until after surgery. Its importance in physiological as well as psychological adjustment pays off multifold in a smoother postoperative course.

### **Postoperative Therapy**

#### **Bed Posture:**

The patient begins physical therapy immediately following surgery. Bed posture is extremely important in this early stage. The bed should be flat and firm with a small pillow supporting the head; and, if need be, other pillows to relieve the pressure of the drainage tubes when present. The hips should be at the same level, the lower extremities straight and the trunk bent slightly away from the operated side. The patient is encouraged to cough and to breathe deeply to dislodge obstructing plugs of sputum and blood clots. A posture mirror is placed at the foot of the bed for the patient to observe and correct his own posture. By no means should large pillows be kept under the patient's head as this increases the possibility of developing a kyphosis. There is no danger in keeping the operated shoulder abducted against a thick pillow in axilla during the first 48 hours.

Do not attempt to do more than overcorrect the patient during the early postoperative period. There is too much splinting of the chest wall secondary to pleural and muscle spasm, and more movement only will increase the pain and spasm and cause more splinting of the chest wall. The patients are ambulatory, usually by the



third day, at which time more motion is ordered. Correct bed posture assumes greater importance for those patients who cannot be ambulated early because of postoperative complications as a means of specifically preventing permanent skeletal deformities.

### Exercises:

Exercises are begun on the first postoperative day in the form of passive, active assisted and active movements to mobilize the shoulder. Emphasis is placed on rotation of the shoulder joint through a complete 180 degrees of motion, if possible, two or three times daily. Slowly, the patient's arm is abducted as far as possible, trying not to stretch the chest muscles. With the elbow bent at a right angle, the arm is slowly rotated, first passively and then actively with assistance. Usually, by the fifth day, full range of motion can be achieved passively and almost completely, actively. These movements are carried out always within the patient's tolerance.

Although rotation of the shoulder is the first movement attempted, the patient is encouraged to move the head, neck and shoulders in all planes.

A pulley system is mounted over the patient's bed so he can assist himself by pulling and offering resistance with the good hand. No other extremity exercises are done in bed, and the patient is sent down to the physical therapy section, normally, on the fifth postoperative day.

A series of exercises to maintain flexibility and range of motion of the extremities, head and neck is prescribed. Simple procedures as touching the ear to the shoulder, the chin to either shoulder, chin to chest, shrugging shoulders, pendulum exercises for the shoulders, wall climbing in abduction and forward flexion and see-saw exercises to promote shoulder rotation are prescribed in quick order. As soon as the sutures are out and the incision is well-healed, some resistance, up to five pounds, is given along with gentle manipulation and very gentle stretching of the shoulder and scapula, followed by head traction with a Sayre sling using increasing increments of weight from 20 pounds to a maximum of 50 pounds over five minutes.

Light-stroking massage is given for ten minutes to the neck and uncovered shoulder muscles for the first week. As soon as the wound is well healed, deep sedative and even friction massage is administered to the spastic areas in the neck, shoulder and scapular muscles. There is no forced stretching of the scapular muscles until the incision is well healed, usually, by the tenth postoperative day.

### **Breathing Exercises:**

Breathing exercises are begun on the first postoperative day with a review of intercostal and diaphragmatic or abdominal breathing, already taught the patient. The breathing is assisted by the therapist's offering resistance with her hands against the patient's chest to strengthen the intercostals and mobilize the chest wall. Usually, in the early stage, the patients will complain of excruciating chest pain, so diaphragmatic breathing is encouraged. A full, even, deep, rhythmical pattern is the goal and is continued throughout the whole treatment regime. As the pain diminishes, more pressure is applied to the chest wall. As the range of motion of the upper extremity improves, breathing exercises, inhaling and raising the arms, exhaling while lowering the arms, is emphasized.

### **Posture Exercises:**

Finally, as the patient progresses to complete expansion of the lung, full mobility of the chest wall and complete range of motion of the shoulder, a program of body posture exercises is added to prevent postural fibrosis. The patient is instructed to stand, walk and sit erect, exercising in front of a posture mirror. He learns to keep his shoulders back by bringing the scapulae together. Rotation of the shoulder joint is maintained by reaching back and touching the opposite scapula; and, standing with the back against the wall, clasping the hands behind the neck and touching the elbows against the wall and then together in front of the nose. The neck is mobilized by touching the ears and then the chin to the shoulders and the chest. These exercises are repeated several times daily.

### **Resistive Exercises:**

Resistive exercises are encouraged, and the patient is coaxed to exercise by tensing his own muscles or using artifacts, such as weights, elastic or spring bands. The maximum resistance is kept within the patient's tolerance, but as his muscles become stronger, he is permitted more and more resistance.

### **Length of Treatment:**

The physical therapy program is continued over a period of three months following operation. Usually, by the end of ten days, there is complete range of shoulder motion. But, treatment must be continued, or scar contracture in the incised tissues and fibrotic

changes and loss of elasticity in the atrophic muscles, secondary to disuse, will quickly overshadow the good of early postoperative therapy and cause permanent damage. Invariably, our experience has shown practically normal return of anatomical relationships and full function following this program of physical therapy. This can be measured by marking out and measuring the difference in scapular motion at zero and 180 degrees abduction, as well as noting the range of joint motion.

### **Occupational Therapy:**

The physiatrist is responsible for prescribing the type of occupational therapy, whether it be recreational, diversional, or functional therapy. For postoperative chest patients, the early endeavor is aimed primarily at mobilizing the upper extremities, but is also assigned for diversional value. Usually, the patients are ambulatory on the fifth postoperative day, and they find their way down to the Occupational Therapy Shop as a relief of boredom. The therapist must be conscious always of maintaining correct body alignment and prevent poor sitting habits in the patients. Frequent rest periods for stretching head, neck and shoulders are called during the day. Occupational therapy is also prescribed to patient's tolerance during the hospital stay with emphasis on lighter crafts and recreational problems.

The postoperative patient is not interested in any occupational therapy until he is relieved of chest and shoulder pain and can breath normally. Light craft work, however, is offered to him very early following the operation, while he is a bed patient. Few patients will work in bed. They usually begin some object in the shop after spending a few days observing other patients. As their work tolerance increases, a little more time is given them, but no heavy craft is prescribed until three months have passed.

A check is made on the work tolerance of the patient for diagnostic purposes, before discharge to home and work. Our small shop is not equipped with extensive machine shops. However, the patient is observed in the procedure of a full five-hour-work day as he saws, hammers, works on the newspaper, in the garden, or a craft simulating his usual work. The pulse, temperature, and respiratory curve is followed carefully, and changes in fatigue are looked for very closely. Rarely, is it necessary to curtail any activity of these postoperative patients. They are discharged able and willing to return to their studies or their work.



## SUMMARY

1. Preoperative instructions in proper bed posture; exercises to mobilize and strengthen the shoulder muscles and chest wall; and, breathing exercises to prevent intercostal muscle contracture, expand the remaining lung tissue to fill the chest cavity and promote deep and even breathing, will pay off multifold in a smoother postoperative course.

2. Postoperative physical therapy usually will get the patient willingly out of bed by the third day, assure him full range of shoulder movement by the tenth day and prevent permanent joint and muscle contractures.

3. A full postoperative course of physical medicine includes: proper bed posture, passive, active, and progressive resistive shoulder exercises, breathing exercises, posture exercises and occupational therapy.

4. Occupational therapy prescription is given according to patient's work tolerance. The main objectives of Occupation Therapy are diversional in the early period and a determination of work tolerance in the later period previous to discharge. The work tolerance of the patient is graded by observing him in craft situations similar to his work or studies.

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## GOUT: A CLINICAL REPORT

JULIO V. RIVERA, M.D.\*

Although gouty arthritis had been recorded in some of the very early medical records and it had been described in Europe for centuries, the disease did not become generally recognized in the United States till relatively recently. Until the 1930's it was considered to be a disease of the Old World recorded as a rarity on this side of the Atlantic.<sup>3</sup> Recent reports of series including hundreds of cases from several medical centers in the United States certainly belie this idea. A review of the Bulletin of the Puerto Rico Medical Association for the last 20 years failed to reveal a single article or case report dealing with this condition. It is our impression that this disease frequently is being misdiagnosed in our midst. Medical textbooks<sup>5</sup> which describe the gouty diathesis as one of the temperate climate may be in part responsible for this. The situation may be similar to that prevailing not long ago in regard to rheumatic fever.

With this thought in mind we have reviewed the medical files at San Patricio VA Hospital in an attempt to determine the importance gouty arthritis had as a cause of disability among Puerto Rican males.

### Results and Comments:

Table I depicts the frequency with which several common types of joint disease which are frequently considered in the differential diagnosis of gout were encountered during a three year period. Ten cases of gout were included. The frequency of gout compared to rheumatic fever should be noted. This is in accordance with the findings of Hench<sup>5</sup> and others who have noted gouty arthritis to be one of the most common forms of acute arthropathy in adult males.

TABLE I  
FREQUENCY OF TYPES OF ARTHRITIS (1953-1956)

Type	Number
Rheumatoid arthritis	43
Arthritis due to trauma	37
Arthritis due to infection, non tuberculous	21
Synovitis, cause undetermined	12
Gouty arthritis	10
Rheumatic fever (without cardiac findings)	7
Tuberculous arthritis	5

\* From San Patricio Veterans Administration Hospital, San Juan, P. R.

Table II summarizes the clinical features presenting in the individual cases.

A diagnosis of gout was never made before 1953. Two of these patients had articular complaints during hospitalizations prior to this date but gout was not recognized. Most of the cases were diagnosed in 1955 and 1956. Since there is no apparent reason why gout should have become prevalent in the last three years one may suspect that previous cases may have been misdiagnosed. In this respect it is interesting that rheumatoid arthritis was the admission diagnosis in four of these patients.

The largest number of patients were in their 30's. The youngest one was 26 years old.

Patient's occupations varied widely, from musician to prosperous merchant.

Gout is infrequent in the Negro race. For this reason its occurrence in two colored patients is of interest.

Only three patients were obese.

The frequency with which joints other than those of the foot were involved should be noted. Two cases presented a polyarthritic picture much like rheumatic fever or rheumatoid arthritis.

X-ray examination of the involved joints was not found very helpful in diagnosis. As is the case in rheumatoid arthritis roentgen changes were frequently absent or not diagnostic except in the more chronic cases. Acutely inflamed joints may show only soft tissue swelling. A clinical diagnosis is usually possible before typical x-ray findings are present.

Without exception, an elevated serum uric acid was found. Several other cases with suggestive clinical findings were not included because of uncertainty of diagnosis.

The absence of leukocytosis in all cases in the presence of accelerated erythrocyte sedimentation rate was surprising. This may have been accidental as leukocytosis has usually been found in larger groups of cases.

Renal disease was found or suspected in one half of the patients had hypertension, probably secondary to renal disease. Renal disease was formerly thought to be a complication of gout. It is now recognized as one of its important and frequent manifestations. Various reports give an occurrence in 22-82% of cases.<sup>1</sup> It is caused by the precipitation of the relatively insoluble urates when they are concentrated in the renal tubules as a result of the reabsorption of water from the glomerular filtrate. Tubular obstruction, dilatation, atrophy and infection (pyelonephritis) follow. The renal lesion is usually of insidious onset frequently manifested only by the silent appearance of albuminuria or some formed ele-



TABLE II  
CLINICAL FEATURES OBSERVED IN CASES OF GOUT

Case	Year	Age	Presenting Symptoms	Admission Diagnosis	Occupation	Race	Obesity	Tophi	Blood Pressure	W.B.C.	E.S.R.	Urological	Serum Uric Acid	X-rays	Treatment Response
1. R.M.	1951	57	Post operative Pain, left foot*	Abdominal tumor	Mechanic	Negro	No	No	160/90	8,750					Aspirin
	1953		Big toe, repeated attacks	Gout				No		8,000	36	No	5.4-7.7	Typical, big toe	Colchicine good.
2. G.A.	1952	59	Mild ache, shoulder, big toe	'Arthritis'	School Teacher	White	No		150/100	6,000	25	No	4.7-6.3		—
	1955	62	Big toe, acute	Gout			No	No	148/80	6,600	24	No	7.0	Spur, 1st MTP joint	Aspirin
3. H.A.	1953	37	Knee, ankle, big toe, one at a time, recurrent since 1950	Bursitis	Truck driver	White	No	No	120/80	5,600	16	No	6.0	Cystic changes 1st metatarsal	Colchicine good.
	1953	60	Wrist, elbow, fingers, feet, 1st MTP, 15 years	Gout	Musician	Negro	Yes	0	170/100	9,700	32	Albuminuria	5.3-6.4	Typical feet	Colchicine good.
5. J.R.T.	1954	26	1st MTP	Traumatic	Student		No	No	—	8,750	—	No	5.6	Negative	Colchicine good.
6. R.T.	1955	34	Recurrent acute polyarthritides, knees, ankles, hip; big toe in last episode (6 yrs.)	Rheumatoid	Policeman	White	Yes	No	146/100	9,300	3	Urteral calculus 1948	5.1-8.1	Negative	Colchicine good.
												Albuminuria Hematuria			

TABLE II (Cont.)

Case	Year	Age	Presenting Symptoms	Admission Diagnosis	Occupation	Race	Obesity	Tophi	Blood Pressure	W.B.C.	E.S.R.	Urological	Serum Uric Acid	X-rays	Treatment Response
7. P.Q.	1955	30	Recurrent & later chronic polyarthritis -knees, ankles, fingers, hip, toes	Gout	None	White	No	Yes	200/130	8,150	36	Albuminuria Hyposthenuria Cylinduria	6-10.9 NPN=33)	Typical, feet	Colechicine - good. Butazolidin Benemid
8. F.G.	1955	63	Recurrent, one or two joints, ankle, toes, knees, 3 yr.	Rheumatoid	Maintenance Supervisor	White	No	No	138/78	6,400	31	No	6.5-9.7	Exostosis, 1st MTP joint	Aspirin
9. R.M.	1956	39	Big toe, knees	Rheumatoid	Merchant	White	Yes	No	150/100	6,400	4	Albuminuria Hematuria Pyuria	5-8.3	Hydrarthrosis, knee	Colechicine - good.
10. M.R.	1956	34	Ankles, knees	Rheumatoid	None	White	No	Yes	128/80	5,700	31	Albuminuria Hyposthenuria	7.7-8.5 (NPN-44)	Negative	Benemid

\* Leiomyosarcoma — small bowel.

ments in the urine. In some patients the renal disease may precede (as No. 6) or overshadow (as in No. 7) the joint disease.

Therapeutic response to colchicine, which was used in most cases, was usually good. In two cases a first course did not produce the desired effect but a second series resulted in prompt relief.

#### DISCUSSION

The importance of early diagnosis in gouty arthritis must be emphasized. Although in some cases disability may not be severe, in others, the recurrent episodes are the cause of considerable distress. A considerable proportion eventually develop chronic joint or renal disease with secondary cardiovascular changes.

Although many conditions may enter into the differential diagnosis of gout, the diagnosis can usually be suspected if an accurate history is obtained. Recurrent episodes of acute arthritis involving especially the distal joints of the extremities in a male should always cause suspicion. The rapid onset, severe disability during the attack and complete recovery in a relatively short period are characteristic. Once thought of, the presence of tophi, urinary abnormalities, hyperuricemia and a therapeutic trail should clinch the diagnosis. In view of the present widespread use of preparations containing salicylates and cortisone-like compounds which are uricosuric careful inquiry should be made when a patient suspected clinically of having gout is found to have a normal serum uric acid.

The last decade has brought about a better understanding of the metabolic abnormalities in gout and consequently considerable improvement in the therapeutic outlook. Using radioactive carbon and "heavy" nitrogen techniques a positive urate balance has been demonstrated. These individuals exhibit increased urate formation both from the breakdown of nucleic acids and from simpler carbohydrate and nitrogen compounds. This results in increased tissue concentration and deposition of crystals when a critical level is attained. There is no apparent defect in uric acid excretion.

Table III summarizes the actions of the drugs most commonly used in gout. Colchicine, corticotropin, cortisone and related compounds and phenylbutazone (Butazolidin) can all be used with success in the treatment of the acute attack. Each carries a certain risk of toxicity which must not be overlooked. Phenylbutazone has the advantage of giving the most prompt relief of pain, its effect being apparent within 2-4 hours. The frequent occurrence of early recurrence following use of cortisone and ACTH makes



these drugs less satisfactory than phenylbutazone or colchicine. Colchicine (and perhaps phenylbutazone) is of diagnostic value because of its inactivity in other arthropathies which may be confused with gout.

TABLE III  
THERAPEUTIC AGENTS USED IN GOUT

Drug	Antiphlogistic Action	Uricosuric Action	Use	Toxicity
Aspirin	+	+	Acute	Cinchonism
Colchicine	+++	0	Acute and Intercritical	Gastrointestinal
Phenylbutazone	+++	++	Acute and Intercritical	Bone marrow depression, sodium & water retention, skin and gastrointestinal
ACTH, Cortisone, etc.	+	+	Acute	Sodium & water retention, gastrointestinal, etc.
Benemid	0	+++	Chronic	Negligible

Regimes using daily dosage of colchicine or phenylbutazone for the prevention of acute crisis have become popular in the last few years.<sup>4</sup> The final evaluation of their effectiveness will take time. Bone marrow toxicity by phenylbutazone is certainly a limiting factor in its use in this fashion.

Although salicylates have a uricosuric effect this is small with ordinary dosages and no beneficial effect in the course of the disease has been demonstrated with their prolonged use. Probenecid (Benemid) although inactive in the treatment of the acute episode has been found effective in producing a persistently negative urate balance.<sup>1,2,3,4</sup> Its action is renal, inhibiting reabsorption of uric acid by the tubular epithelium. It can be administered for long periods without loss of effectiveness. Toxicity is infrequent and not serious. Although initially it may result in an increased frequency of acute paroxysms, these eventually become less frequent and may cease entirely.<sup>2</sup> In some cases mobilization of large tophi and improvement of chronic joint and renal disease have been demonstrated. In most patients the serum uric acid is brought down to normal. Of practical interest is the fact that salicylates have been found to inhibit ability of probenecid to decrease the serum uric acid.<sup>6</sup> Therefore their concomitant use is not recommended.

#### SUMMARY

The clinical findings in 10 cases of gout encountered during a three year period in a veterans hospital in Puerto Rico have

been reviewed. Gouty arthritis appears to be one of the common forms of acute arthritis among adult males. Renal involvement was found to be relatively common. The indications for the use of the available therapeutic agents have been considered briefly.

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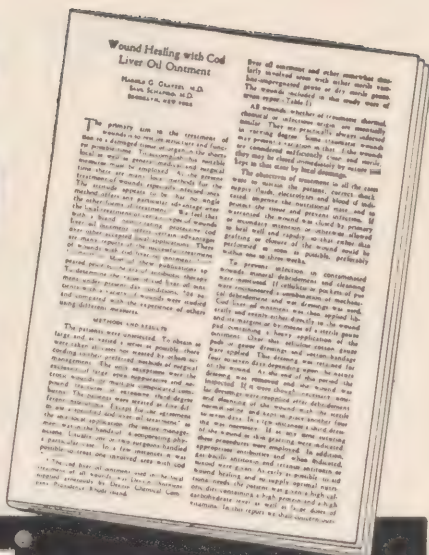
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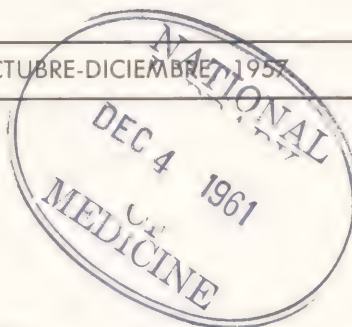
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## ACLARACION

Por causas ajenas a la voluntad de los directores de la Asociación Médica de Puerto Rico la publicación del volumen 49 del Boletín Médico correspondiente al año 1957 no pudo completarse y permanecieron sin publicarse el discurso del presidente de la A.M.P.R. de ese año, doctor Guillermo Picó, así como los informes sometidos a la Cámara de Delegados en su reunión ordinaria de noviembre.

Con esta edición especial del Boletín procedemos a dar cumplimiento a un acuerdo de la Cámara de Delegados completando el volumen 49 de nuestro Boletín; pero lo que es más importante aún, traemos a la atención de nuestros compañeros médicos las gestiones sobresalientes que en pro de la clase médica puertorriqueña y la salud de nuestro pueblo realizara el doctor Guillermo Picó durante su gestión presidencial.

Los problemas por los cuales lucharon tan tenazmente el doctor Picó y los compañeros que con él compartían la dirección de la Asociación Médica en el año 1957, permanecen aún latentes y muchos han alcanzado mayor prominencia.

Al repasar ahora, cuatro años más tarde, los planteamientos y recomendaciones que el doctor Picó hiciera al finalizar su gestión administrativa nos damos cuenta cabal de lo ardua de su lucha y los sinsabores y decepciones que experimentara durante su presidencia, todo lo cual no le impidió seguir en su empeño por alcanzar todos los objetivos que se había trazado al comienzo de su labor.

En el momento crucial por el cual pasa nuestra profesión, cuando todos, no importa su preparación o jerarquía, se creen con derecho a opinar sobre cuestiones médicas, es bueno que todos los médicos, muy especialmente los de la nueva generación, conozcan el proceder de los hombres a quienes hemos confiado en años pasados la dirección de la A.M.P.R. Es por ello que exhorto a todos los miembros a leer con detenimiento los artículos que en esta edición reproducimos y a meditar sobre todos y cada uno de los planteamientos en ellos contenidos.

Enrique Pérez Santiago, M.D.  
Presidente

Santurce, P. R., 23 de noviembre de 1961.

### EL MEDICO Y LA POLITICA\*

En los últimos años se ha insistido por mis predecesores en la presidencia de la Asociación Médica de Puerto Rico, en la necesidad de mayor participación de los médicos en las distintas actividades cívicas de nuestro pueblo. Así decía el Dr. Jaime Pou en su discurso presidencial el año pasado:

"El Médico debe demostrar interés en el bienestar general de sus conciudadanos compenetrándose con los propósitos y las esperanzas del pueblo. Debe él mostrar genuino interés en las actividades de la comunidad sirviendo a la misma en forma activa y positiva. El médico debe darse a conocer no sólo como sanador de cuerpos, sino también como colaborador en todas las actividades de aspecto comunal donde pueda trabajar hombro a hombro junto a los otros miembros de la sociedad. Esto requiere sacrificios, tacto y devoción. Implica el co-dearse con sus semejantes, no como de médico a paciente, no como un profesional a un lego, sino como de ciudadano a ciudadano".

He observado que quizás estimulados por estas prédicas nuestros compañeros han reaccionado y ya no es extraño encontrar médicos que toman mayor parte activa en distintas organizaciones cívicas y que participan en actividades y campañas que redundan en beneficio de nuestro pueblo. Los médicos se están dando cuenta que además de curar las enfermedades, es su deber ayudar a erradicar los otros males que afectan a nuestra comunidad. Tenemos que identificarnos más y más con los demás miembros de nuestra comunidad no bastándonos nuestras relaciones profesionales entre médico y enfermo. Debemos seguir el ejemplo de la Asociación Médica del Bronx en New York, la cual tiene como requisito el que cada miembro pertenezca a algún grupo cívico de la comunidad.

Los intensos estudios hechos por el médico le convierten en un perito en psicología humana y aplicando en la práctica estos conocimientos, puede llegar a la solución de distintos problemas que existan en la comunidad. Como muy bien dijera recientemente el Dr. Olan Meeker: "Es sorprendente el paralelismo que existe entre las enfermedades humanas y aquellas de la comunidad. Al médico con experiencia le será muy fácil seleccionar la propia actitud que debe asumir en un problema de la comunidad, si aplica a éste sus conocimientos médicos".

Hay una fase de estas actividades en beneficio de nuestro pueblo que necesita mayor dedicación de parte de nosotros los médicos; ella

\* Discurso pronunciado por el presidente de la Asociación Médica de Puerto Rico, doctor Guillermo Picó, durante la sesión inaugural de la Quincuagésima-Cuarta Asamblea Anual de la Asociación, celebrada el día 19 de noviembre de 1957.

la constituye las actividades políticas pues no debemos olvidar que la política constituye la ciencia de gobernar los pueblos, y que debe ser un deber de todo buen ciudadano cooperar en la formación del buen gobierno de su pueblo. No sólo se cumple con este deber concurriendo cada cuatro años al ejercicio del sufragio, sino cooperando en que el mismo sea una fiel demostración de la pureza democrática expresiva del anhelo ideológico del pueblo y dotador al mismo de servidores públicos eficientes que sepan si necesario fuere sacrificarse en aras de las necesidades públicas, al igual que lo hacemos los médicos en beneficio de todas las clases sociales, cuando atendiéndolas frente a las enfermedades en defensa de sus vidas empezamos por poner también en riesgo o peligro nuestras propias vidas.

Como el médico debe predicar con el ejemplo, de ahí que debe estar dispuesto no sólo a laborar profesionalmente, sino que debe además cumplir el deber cívico de servir en el gobierno de su país, figurando con sus conciudadanos en las comisiones gubernamentales o en los cargos electivos, producto de las urnas electorales, llámense éstos, miembro de una asamblea municipal o mandatario público en una curul legislativa de nuestra Cámara de Representantes o Senado, en donde debemos también saber cumplir, con igual espíritu de abnegación y sacrificio, con los deberes cívicos que democráticamente conlleva el mandato del pueblo a los servidores públicos de nuestra querida isla de Puerto Rico.

Si nuestra clase médica se decide a marchar por esta ruta coordinadora de los deberes cívicos y profesionales, tendremos una nueva oportunidad de aportar mayor curso a los intereses médicos, que nunca podrán ser mejor defendidos que cuando los defendemos nosotros mismos y nunca tampoco nuestro pueblo en el ramo de Salud Pública podrá ser mejor asesorado que cuando el médico, como clase, forme parte atendible del gobierno.

Véase por tanto que mis palabras giran en el plano alto del verdadero concepto político, con olímpico desdén al barato politiquero que sólo sirve para adulterar los sanos principios democráticos, que son los que deben de guiar a todo pueblo en el ejercicio de un buen gobierno inspirado en la felicidad de su pueblo.

Ahora bien, durante mi incumbencia en la presidencia de la Asociación, en el ejercicio de las funciones de mi cargo, he visitado en distintas ocasiones la Asamblea Legislativa, teniendo así la oportunidad de cambiar impresiones con nuestros legisladores, acerca de distintos problemas de salud de nuestro pueblo, y pecaría de injusto si no hiciera constar que siempre he recibido deferencias y he visto además un marcado interés de parte de los legisladores, para atender los asuntos planteados por nuestra Asociación en vigilancia de los derechos de nuestra clase médica y salud de nuestros conciudadanos.

He estado presente en muchas vistas públicas sobre legislación de interés médico. En todo momento he encontrado una actitud responsable de parte de nuestros legisladores y he sido testigo de los grandes sacrificios que ellos hacen, trabajando intensamente para cumplir con el pueblo que los eligió. Deseo en este momento hacer público reconocimiento de esa labor inmensa que llevan nuestros legisladores, tanto los del partido de la mayoría como los de los partidos de la minoría. También debo hacer mención especial de la labor sacrificada y altamente meritoria que realizan en la Cámara de Representantes, nuestros queridos compañeros, el Dr. Pablo Morales Otero, represen-



tante electo por el Partido Popular y el Dr. Leopoldo Figueroa, representante electo por el Partido Estadista. Ellos dos trabajan unidos en todo lo que significa mejoramiento para la salud de nuestro pueblo. Sin embargo, creemos necesaria más representación médica para ayudar a esos dos compañeros en su ardua labor y también para ocupar algún escaño en el Senado en el cual no está representada nuestra profesión.

En la historia de Estados Unidos y las Repúblicas Latino-Americanas encontramos que los médicos han tomado siempre parte activa en su gobierno. Así podemos ver que cinco médicos pasaron a la historia como firmantes en 1776 de la Declaración de Independencia de las colonias que se convirtieron en los Estados Unidos de América. Desde entonces por lo menos un médico ha sido miembro de cada Congreso Americano. Hay seis médicos en el actual Congreso. Recientemente visitó a Puerto Rico el Dr. Ramón Villedas Morales, distinguido médico especialista en niños, que ha sido electo Presidente de la República de Honduras. Tenemos el placer y el honor de tener aquí con nosotros, a mi querido amigo el distinguido oculista Dr. Humberto Escapini, quien a pesar de su intensa labor en la práctica de su profesión, aceptó la designación de Vice-Presidente de la República de El Salvador.

Y ahora para terminar, volviendo la vista hacia el pasado, tenemos, que la participación de nuestros médicos en la política no es nada nuevo; lo han estado haciendo activamente desde los tiempos coloniales. Todos recordamos los nombres de ilustres compañeros que se han distinguido tanto por su habilidad profesional como por su actividad política. Los doctores Ramón Emeterio Betances, Rafael del Valle, Eliseo Font y Guillot, Calixto Romero Cantero, Francisco del Valle Atilés, José Celso Barbosa, José Gómez Brioso, Eugenio Fernández García, Manuel Pavía Fernández, Francisco M. Susoni, Carlos M. de Castro, Antonio Fernós Isern, Francisco Mundo, Leopoldo Figueroa, Blás Herrero, Julio A. Santos, Pablo Morales Otero, y muchos otros, cuyos nombres ahora se nos escapan a la memoria, tienen su sitio en las páginas gloriosas de la historia médica y política de nuestro pueblo.

Y siendo ésta la actitud asumida por estos compañeros distinguidísimos, pertenecientes casi todos a generaciones anteriores a la nuestra, ¿puede haber duda sobre los puntos de vista que he esbozado? Si la hubiese, veamos el espaldarazo que reciben del Código de Ética de nuestra Asociación, cuando habla de nuestra responsabilidad, no sólo en relación con el individuo, sino con la Sociedad, si entonces recordamos, la relación existente en derecho público entre sociedad, estado y gobierno.

Nuestro Código de Ética reza:

"Los nobles ideales de la profesión médica implican que la responsabilidad del médico se extiende no sólo al individuo, sino también a la Sociedad, donde estas responsabilidades merecen su interés y participación en actividades que tengan el propósito de mejorar tanto la salud como el bienestar del individuo y la comunidad".

Termino dando las gracias a mis oyentes por la cortesía dispensada en oírme y deseando completo éxito a mi sucesor en la Presidencia de nuestra Asociación, el valioso y querido compañero, Dr. Luis Guzmán, para quien os pido cordial y leal cooperación.

## INFORME DEL PRESIDENTE

**AÑO 1957**

**Sr. Presidente de la Cámara,**

**Señores Delegados,**

**Amigos todos:**

Después de un año de ardua brega en la presidencia de la Asociación Médica correspóndeme ahora, dando cumplimiento a las disposiciones reglamentarias, comparecer ante ustedes para dar cuenta de nuestras gestiones.

Deseo, en primer término, reiterar a todos mi sincera gratitud por haberme dispensado el alto honor de designarme para dirigir la Asociación Médica durante el año que termina. Si bien para poder desempeñar el honroso cargo conferídome he tenido que realizar grandes esfuerzos y alterar drásticamente mi programa de trabajo, la satisfacción de haber servido a nuestra Asociación y por ende al pueblo de Puerto Rico en general, recompensa con creces cuantos inconvenientes haya tenido que afrontar durante el año que termina.

Quiero repetir, para conocimiento general, que cuanto hayamos podido realizar desde la presidencia de la Asociación no debe interpretarse como el logro de una persona en particular y sí como resultado del esfuerzo, la dedicación al trabajo y el compañerismo de todos cuantos han compartido conmigo la obligación de dirigir nuestra agrupación durante este período. A ese esfuerzo aunado de los dirigentes han colaborado intensamente además los presidentes y miembros de varios de nuestros más importantes comités.

No cabe duda de que no hemos podido realizar todo cuanto nos propusimos ni cuanto anhelábamos; pero ello ha sido así no por falta de diligencias de nuestra parte sino más bien por lo complejo y variado de los problemas a los cuales nos hemos enfrentado y por la incompreensión de algunas de las personas en cuyas manos estaba ayudarnos a solucionarlos.

Es una triste realidad, que no podemos ocultar, que a la profesión médica en general no se le tiene ahora en el mismo alto sitio que se le tuvo en tiempos pasados. Quizás sea ello consecuencia lógica de los cambios drásticos que se han operado en todos los órdenes de vida, o quién sabe si es que los miembros de la presente generación médica no hemos sabido ganarnos la plena confianza de nuestros pacientes y de toda la comunidad. Cualquiera que sea el motivo, lo cierto es que los dirigentes de la Asociación Médica tenemos que realizar un esfuerzo sobrehumano para tratar de convencer a los señores legisladores, a los señores alcaldes y al propio señor gobernador de que nuestras actuaciones están basadas no sólo en nuestro propósito de servirle a nuestra matrícula, sino en un sincero deseo de nuestra parte de mantener en alto el nivel de la profesión médica puertorriqueña para beneficio de la comunidad en general. Es sin duda alguna, la Asociación Médica de Puerto Rico, una de las agrupaciones que más labor realiza en beneficio de la comunidad; pero el proceder individual de alguno de sus miembros echa por el suelo todo el buen trabajo que colectivamente

realizamos, y tiende a crearnos una mala voluntad en las esferas gubernamentales y en toda la comunidad.

Esto, sin embargo, no debe descorazonar a los futuros directores de la Asociación. Poco a poco estamos logrando realzar nuestro prestigio colectivo, y no tardará el día en que nuestro gobierno, vuelva a contar con nosotros, como lo hacía en el pasado en todo asunto que se relacione con la salud de nuestro pueblo.

Hecho este pequeño exordio, pasemos ahora a enumerar, aunque sea sucintamente, puesto que la gran mayoría están al tanto de nuestras actividades, algunos de los problemas de mayor trascendencia durante el año de nuestra incumbencia en la presidencia de la Asociación.

### **Legislatura Estatal:**

Este año, al igual que en años anteriores, una de nuestras mayores preocupaciones ha sido la legislación de carácter médico.

Sabiendo que la mejor forma de ocuparnos de este aspecto de nuestro programa es estableciendo contacto y procurando mantener las mejores relaciones posibles, con los señores legisladores, el día 14 de enero nos dirigimos a todos los señores senadores y representantes en los siguientes términos:

"Distinguido amigo:

En nombre de la Asociación Médica de Puerto Rico y en el mío propio deseo extenderle nuestra más efusiva felicitación al asumir Ud. las funciones de su alto cargo en la Legislatura estatal.

Como es de su conocimiento, la Asociación Médica de Puerto Rico está profundamente interesada en el mejoramiento de la salud de nuestros conciudadanos, y la Junta de Directores que me honro en presidir se complace en ponerse a las órdenes de Ud. y demás dirigentes de nuestro pueblo para ayudarles a conseguir una solución favorable a todo asunto relacionado con problemas de salud que sea traído ante la consideración de ese honorable cuerpo legislativo.

Con mis mejores deseos de éxito en el desempeño de su ardua labor, quedo de Ud.

Atento amigo y S.S.,

GUILLERMO PICO, M.D.

Presidente

En contestación a esta comunicación recibimos cartas verdaderamente interesantes de varios de los señores legisladores, que contribuyeron a hacer renacer nuestra confianza en el éxito de nuestras gestiones.

Más tarde, con la excelente cooperación del presidente del Comité de Legislación, doctor Francisco Berio, organizamos en nuestros salones un ágape en honor a los señores legisladores, el cual se llevó a efecto el día 28 de febrero y resultó muy concurrido y lucido. En esta ocasión tuvimos oportunidad de cambiar impresiones con un gran número de legisladores y todos quedamos encantados con las reiteradas manifestaciones de cooperación que recibimos de todos ellos.

No cabe la menor duda de que la mejor manera de hacer buenas relaciones en favor de nuestra Asociación es mediante la celebración de estos actos de confraternidad, durante los cuales se cambian impresiones; damos a conocer nuestros puntos de vista en problemas de gran trascendencia y hacemos amigos a los cuales podemos recurrir en futuras ocasiones para luchar en pro de nuestra causa.

Cordialmente exhortamos a nuestros sucesores a continuar esta norma.



### Legislación Médica:

Ya hemos informado a ustedes en reuniones anteriores en cuanto al resultado de nuestras gestiones en relación con la legislación de carácter médico presentada en la pasada sesión legislativa ordinaria. A la ligera, vamos a referirnos a aquella que consideramos de mayor interés:

1—**Médicos Extranjeros:** Como ustedes recordarán el proyecto preparado por el honorable Secretario de Salud, doctor Juan A. Pons, y que contaba con el respaldo de nuestra Asociación, con el fin de poner coto a la importación de los médicos extranjeros, fue sustituido a última hora por otro proyecto mediante el cual se extiende por un año más la vigencia de la ley especial que cubre a los médicos extranjeros.

Es bueno aclarar en este momento que dicho cambio de última hora fue motivado, sin lugar a dudas, por la gran presión ejercida por los médicos a los cuales cubre dicha legislación, ya que muchos de ellos pretenden seguir ejerciendo en nuestra Isla sin llenar el requisito de someterse a los exámenes de reválida y sin hacerse ciudadanos americanos.

Este es un asunto al cual tenemos que darle particular atención durante la próxima sesión legislativa para evitar que se pretenda pasar un proyecto por sorpresa mediante el cual se ordene al Tribunal Examinador de Médicos a extenderle licencia regular a dicho grupo de médicos.

2—**Día del Médico:** Este año nuestra Legislatura aprobó una resolución concurrente autorizando al Sr. Gobernador a declarar el primer domingo de Septiembre de cada año como el Día del Médico.

Con la cooperación del Comité de Relaciones Públicas organizamos una serie de actividades, todas las cuales resultaron sumamente lucidas, y que son del conocimiento de ustedes.

Informamos sobre esta actividad al Director de Relaciones Públicas de la Asociación Médica Americana, Sr. Leo E. Brown, quien acusó recibo de nuestra comunicación en los siguientes términos:

"Dear Doctor Picó:

I was delighted to receive your excellent report on the celebration of "Physician's Day in Puerto Rico". You are to be congratulated on the excellent promotion and planning that went into this particular project. Although I was forced to get an interpreter to read the news releases that you sent to me, I can assure you that I thoroughly enjoyed hearing them.

In order that we can let our state medical associations know of this project and the excellent way in which it was promoted by your society, we are including mention of it in the forthcoming issue of the "Secretary's Letter".

Please give my regards to Bob Jiménez for the good public relations resulting from this project.

Sincerely yours,  
Leo E. Brown

En la carta del Secretario de la A.M.A. del día 14 de octubre de 1957, apareció la siguiente nota:

"LEGISLATIVE ACTION HONORS PUERTO RICO DOCTORS.

In a spontaneous action last May, the Puerto Rico legislature passed a joint resolution dedicating the first Sunday of September of every year, as "Physician's Day" and authorizing the governor to dictate a proclamation to that effect.

Dr. Guillermo Picó, president of the Medical Association of Puerto Rico, reports that the 1957 "Physician's Day" event was "one of the most valuable projects ever held in strengthening our relations with the rest of the community".

Here a few of the public relations benefits he listed: Leading newspapers of the island carried stories about medicine and the profession; the mayoress of San Juan dedicated a special proclamation and invited all physicians and their wives to a social function; a large group of doctors including officers of the association, visited the grave of Dr. Manuel Quevedo Báez, who was the association first president; ministers paid tribute to physicians in their sermons on that Sunday; leading hospitals honored their staffs at special ceremonies and luncheons, the San Juan Horse Racing Association sponsored a "Physician's Day Classic", and civic clubs invited physicians as honored guests at their weekly luncheons".

Confiamos que el próximo año El Día del Médico resulte aún más lucido y que poco a poco la celebración de este día revista mayor importancia.

3—**Estudio sobre Servicios Médicos:** Tan pronto se anunció en la Prensa que el Sr. Gobernador había recomendado a la Legislatura estatal el que se llevara a efecto un estudio sobre servicios médicos en Puerto Rico, enviamos al honorable Muñoz Marín la siguiente carta:

18 de marzo de 1957

Hon. Luis Muñoz Marín  
Gobernador  
La Fortaleza  
San Juan, P. R.

Distinguido amigo:

Hemos leído detenidamente su mensaje especial a la honorable Legislatura estatal en relación con el problema de la asistencia médico quirúrgica a la clase media y a los obreros.

La Asociación Médica de Puerto Rico está consciente de la necesidad de resolver este problema y deseamos ponernos incondicionalmente a sus órdenes y ofrecerle toda nuestra cooperación en el estudio que V. H. ha recomendado a nuestra Asamblea Legislativa.

Aprovechamos esta oportunidad para comunicarle que por gestiones de esta Asociación los honorables Ernesto Ramos Antonini, Pablo Morales Otero y Rodolfo Apon- te han presentado este año el P. de la C. #237 para autorizar la formación de asociaciones con fines no pecuniarios para prestar servicios médico-quirúrgicos.

Esta Asociación tiene verdadero interés en que se organice en Puerto Rico el plan de Escudo Azul como un medio eficaz de poner al alcance de la clase media y de los obreros todos los adelantos de la ciencia médica moderna. Tengo sumo placer en enviarle copia del memorándum sometido por nosotros al honorable Ernesto Ramos Antonini en relación con el P. de la C. #237.

Espero tener la oportunidad de cambiar impresiones con V. H. en un futuro cercano en torno a dicho proyecto y otros problemas de carácter médico de interés general.

Reitérole el testimonio de mi alta consideración personal, y quedo de Ud.,

Amigo que le aprecia y le distingue,  
Guillermo Picó, M.D.,  
Presidente

Con fecha 21 de marzo, recibimos la siguiente comunicación del Sr. Gobernador:

Dr. Guillermo Picó, Presidente  
Asociación Médica de Puerto Rico  
Apartado 9111  
Santurce, P. R.

Estimado compatriota:

Muchas gracias por su carta del 18 de marzo ofreciéndome su cooperación en la solución de los problemas de asistencia médico-hospitalaria para la clase media y los trabajadores.

Puede estar seguro que tendré muy en cuenta su endoso al P. de la C. 237, que autoriza la formación de las asociaciones con fines no pecuniarios para prestar servicios médico-quirúrgicos.

Tendré mucho gusto en recibirle para cambiar impresiones sobre problemas médicos de interés general. Oportunamente le comunicaré la fecha de esta entrevista.

Cordialmente,  
Luis Muñoz Marín

Como es de conocimiento de ustedes, dicho estudio ha sido encomendado a un grupo de profesionales de la Escuela de Salud Pública y Medicina Administrativa de Columbia, encabezado por el doctor Ray E. Trussell, y hemos celebrado con ellos sendas conferencias durante las cuales hemos discutido ampliamente los problemas médicos de nuestro país y les hemos expuesto nuestro criterio.

Con fecha 21 de agosto ppdo. recibimos del doctor Trussell la siguiente comunicación:

August 21, 1957

Dear Doctor Picó:

I was very glad I had a chance to talk with you before I left Puerto Rico recently. The questions which we discussed so vigorously I felt are valuable subjects for consideration. It is a pleasure for me to work with you and Dr. Guzmán in this preliminary survey and study design. As I indicated before, and I want to reiterate again, no recommendations or change will be made during this phase of our work. Our sole responsibility is to develop proposals for studies to be done which will give you a clearer picture of the total medical care problems in Puerto Rico. You and Dr. Guzmán will be asked to review the material before it is submitted.

The problem of providing good medical care are difficult in any country. You have many assets in your situation which need to be developed. I do not think you have problems which are particularly different from those in many other countries, but have more chance for exercising imaginative leadership doing something about them.

It has been a pleasure for me to become acquainted with you and Dr. Guzmán. I look forward to seeing you again.

With kind personal regards,

Sincerely yours,  
Ray E. Trussell, M.D.M.P.H.  
Executive Officer



## Nuestra contestación a dicha carta lee como sigue:

August 27, 1957

Dr. Ray E. Trussell  
Executive Officer  
School of Public Health and  
Administrative Medicine  
600 West 168th St.  
New York 32, N. Y.

Dear Dr. Trussell:

Please accept my most sincere thanks for your kind letter.

It was a great pleasure for Doctor Guzmán and myself to discuss further with you the points of view of the Puerto Rico Medical Association in relation to the medical care problems of our island.

We appreciate very much your offer to give us the opportunity to review the material before it is submitted to the pertinent authorities.

We are aware of the great importance of the study that you are undertaking and wish to reiterate our sincere desire to help you in every respect. We have great hopes that under your able leadership great ideas will come out from this study that certainly will help to solve some of our medical care problems.

We look forward to seeing you soon again in Puerto Rico. Kindest personal regards.

Sincerely yours,  
Guillermo Picó, M.D.  
President

Hasta el momento actual sólo hay un punto en controversia con los señores a cargo de este estudio, y es el que ellos estiman que los hospitales gubernamentales deben habilitar algunas camas para atender casos de personas pudientes. Este aspecto ha sido francamente combatido por nosotros, y esperamos que logremos convencer a los propulsores del error de tal medida. Más adelante nos referiremos más específicamente a este asunto.

**4—Escudo Azul:** Ya ustedes conocen el hecho de que el programa tendiente a crear un verdadero programa de Escudo Azul en nuestra Isla ha sido uno de nuestros más anhelados proyectos y cómo, debido a las maquinaciones de un grupo minoritario de directores de la Cruz Azul, bajo el liderato del señor La Cruz, no fue posible que los proyectos sometidos por nosotros fueran considerados durante la pasada sesión legislativa ordinaria.

A los fines de record, vamos a transcribir en este informe el acuerdo que con fecha 6 de mayo de 1957 y después de innumerables reuniones, fue firmado por el presidente de la Cruz Azul, doctor Víctor J. Montilla, en representación de la Junta de Regentes de dicha agrupación y por el suscribiente, en representación de nuestra Asociación:

"La Asociación Médica de Puerto Rico y la Junta de Regentes de la Cruz Azul de Puerto Rico, separadamente, han considerado el P. de la C. # 237, no según fue impreso, sino según fue radicado en la Cámara de Representantes, y el P. de la C. # 250, y desean hacer la siguiente exposición de principios y acuerdos:

**Primero:** Las partes favorecen la aprobación simultánea de ambos proyectos, siempre y cuando que el P. de la C. # 237, se enmiende en su apartado número 1 de la Sección 3, adicionándole al final de la oración en dicho párrafo 1 las siguientes palabras "y si ésta rehusare seleccionarlos, serán seleccionados por asamblea de los médicos participantes citados para tal propósito".

**Segundo:** Tan pronto el P. de la C. 237 se convierta en ley la Asociación Médica de Puerto Rico y la Junta de Regentes de la Cruz Azul de Puerto Rico se comprometen a estructurar un plan de Servicios Médico-Quirúrgicos y el reglamento correspondiente.

**Tercero:** La Asociación Médica de Puerto Rico formalmente expresa que favorece e impulsará una administración conjunta para el Escudo Azul y la Cruz Azul de Puerto Rico.

**Cuarto:** Tan pronto se estructure un plan aceptable para ambas partes, La Cruz Azul de Puerto Rico se compromete a traspassarle a dicho Plan toda su actual matrícula y las reservas correspondientes para Servicios Médico-Quirúrgicos, entendiéndose que su obligación para con el público suscriptor cesará dentro del término prescrito por ley".

Después de la sesión legislativa los proyectos siguieron bajo estudio de la Comisión de Salud y Beneficencia de la Cámara de Representantes, y estábamos nosotros bajo la impresión de que todo marchaba a perfección, pero a fines de septiembre vino a verme el doctor Leopoldo Figueroa, y me informó, para gran sorpresa mía, que la Comisión había alterado completamente los proyectos y que él quería ponernos en conocimiento de tal situación para que actuáramos rápidamente.

Inmediatamente tuvimos un cambio de impresiones los doctores Guzmán, Licha y el suscribiente con el doctor Figueroa, quien en esta ocasión, muy amablemente nos proporcionó una copia de los tres proyectos con sus enmiendas, las cuales, dicho sea de paso, desvirtúan completamente el propósito nuestro al presentar dichas medidas legislativas. Tan pronto tuvimos estas enmiendas en nuestro poder, el Comité de Escudo Azul, bajo la presidencia del doctor Licha, empezó a trabajar en la redacción del memorándum. Una vez terminado este memorándum celebramos una reunión en el Swiss Chalet a la cual asistieron los doctores Morales Otero y Figueroa, el honorable Ramos Antonini, el licenciado Dávila, de la Oficina de Servicios Legislativos, y los doctores Guzmán, Pou, Licha y el que os habla, y discutimos una por una todas las alteraciones hechas a los tres proyectos por la Comisión de Salud y Beneficencia y el memorándum preparado por nuestro comité, y después de un amplio cambio de impresiones que se prolongó desde las 12:30 hasta las 6:30 de la tarde, obtuvimos la casi completa seguridad de los señores legisladores presentes en la reunión de que todo volverá a su estado original.

Es verdaderamente digna del mayor encomio la actitud asumida por el doctor Figueroa en este asunto de trascendental importancia para nuestra Asociación, al traer a nuestro conocimiento esta anómala situación. A no ser por ello, hubiéramos sido sorprendidos al iniciar sus trabajos la próxima sesión legislativa. Queremos también hacer reconocimiento en esta ocasión de la cooperación que nos ofrecieron en esta oportunidad el licenciado Ramos Antonini y el doctor Morales Otero.

No tenemos la menor duda de que no todo será color de rosa en nuestra lucha por conseguir la aprobación de estos proyectos. Sabemos que hay intereses creados moviéndose tras bastidores para entorpecer el que podamos alcanzar nuestro objetivo; pero si no nos descuidamos y seguimos luchando por lo que consideramos es lo más justo y beneficioso para la clase médica y para la comunidad estoy seguro que lograremos poner de nuestro lado a la gran mayoría de los legisladores, los regentes de la Cruz Azul y los propios suscriptores, que serán los que más se beneficiarán de este programa.

Queremos aprovechar también esta ocasión para testimoniar una vez más nuestra gratitud al señor John Castellucci, Director Ejecutivo de los planes de Escudo Azul en los Estados Unidos, quien nos ha alentado y respaldado en nuestro propósito, y quien ha ofrecido trasladarse próximamente a nuestro país para seguir laborando con nosotros en esta lucha.

### **Centro Médico y Regionalización:**

Además de la legislación de carácter médico a que nos hemos referido anteriormente han habido dos asuntos que nos han mantenido bastante ocupados.

El proyecto del Centro Médico, así como el proyecto de Regionalización recientemente inaugurado por el Departamento de Salud, con la cooperación de la Fundación Rockefeller tienen el respaldo nuestro, puesto que ambas medidas tienden a dotar al pueblo de mejores servicios médicos. Los propulsores de ambos proyectos abogan, sin embargo, por algo que no cuenta con nuestro respaldo. Nos referimos a la idea de habilitar camas privadas en las instituciones del gobierno. La idea es tan absurda y tan ilógica, que aún los propios dirigentes gubernamentales con quienes hemos discutido este asunto se asombran de que la misma se esté incubando bajo su administración. No concebimos nosotros, como no lo conciben los dirigentes del gobierno, que las camas a la disposición de las clases necesitadas de nuestro pueblo, puedan dedicarse a proporcionar atención médica a los pudientes, cuando en todas las instituciones médicas del país hay miles y miles de pacientes pobres haciendo turnos por meses y años para conseguir cama y poder someterse a intervenciones quirúrgicas que son esenciales para que sigan llevando una vida normal.

Hemos luchando tenazmente en contra de esta idea en cuanto sitio hemos tenido oportunidad de hacerlo; lo hemos hecho en nuestro carácter de presidente de la Asociación Médica ante las autoridades gubernamentales; nos hemos expresado en nuestro carácter personal en el seno de la facultad médica de la Escuela de Medicina; y nos disponemos a seguir nuestra brega cuando salgamos de la presidencia, porque nuestro deber como médicos y nuestra obligación como ciudadanos conscientes, es luchar porque no se cometan injusticias, y no podemos concebir mayor injusticia que la de quitar al pobre parte de las escasas facilidades en los hospitales del gobierno para ponerlas al servicio del que cuenta con recursos para cubrir sus propias necesidades.

### **Escuela de Medicina:**

Nuestras relaciones con la dirección de la Escuela de Medicina no han sido este año todo lo cordiales que hubiéramos deseado. Se ha debido ello en parte a nuestra oposición a que en el propuesto Centro Médico se establezca práctica privada para beneficio de unos pocos médicos y en perjuicio de los indigentes que necesitan esas facilidades hospitalarias. Quizás también se haya debido ello a nuestra lucha por conseguir que se le dé mayor participación en los asuntos administrativos de la escuela a todos cuantos desde su comienzo hemos venido colaborando en su funcionamiento.

Sabemos que por esta posición nuestra, se nos ha acusado ante el estudiantado y ante el profesorado de las ciencias básicas de estar en contra de la Escuela. Nada más fuera de la realidad. No podríamos estar en contra de la Escuela. Somos parte de ella y estamos en la obligación moral y profesional de defenderla. A lo que sí nos oponemos es a que al amparo de ese cariño que todos debemos a la Escuela se puedan cometer injusticias y a que un grupo determinado pretenda hacer uso indebido de su influencia en las esferas superiores.

Gracias a la posición adoptada por nosotros la situación preva-  
leciente empieza a dar trazas de normalizarse, cosa que nos satisface grandemente, puesto que nuestra misión primordial y única debe ser



la de forjar nuestras futuras generaciones médicas proporcionándoles no sólo vastos conocimientos de la ciencia médica sino también los principios humanitarios alrededor de los cuales gira nuestra profesión.

#### **Administración de Veteranos:**

A mediados de este año, y siguiendo sugerencias de nuestro buen amigo, el doctor Jaime Pou, iniciamos conversaciones con el doctor Jaime Serra Chavarry, a fin de que se lleve a cabo una revisión de la lista de honorarios médico-quirúrgicos que la Administración viene pagando hace varios años. Después de nuestra entrevista preliminar con el doctor Serra Chavarry procedimos a enviarle la siguiente carta:

June 27, 1957

Dr. Jaime Serra Chavarry  
Manager  
Veterans Administration  
San Juan, Puerto Rico

Dear Dr. Serra Chavarry:

Ratifying our recent conversation, I wish to bring to your attention our comments in relation to the schedule of fees of the V. A., which has been in effect since September 1, 1954.

As I informed you during our recent interview the GUIDE FOR CHARGES FOR MEDICAL SERVICES of the VA clearly states at its beginning that it "has been prepared as a guide for the use of State Medical Societies and Veterans Administration Representatives in negotiating agreements for medical services to veterans on a state wide basis".

The Puerto Rico Medical Association believes that the fees for medical services actually paid by the VA to our physicians are very low if we compare them with those paid for the same services by the local Blue Cross and the Medicare programs. We would like to enter into official conversation with representatives of the V. A. to establish a new schedule of fees for medical services, compatible with the present situation in Puerto Rico.

We hope that our position will receive your approval and will appreciate very much if you inform us as soon as possible when we could start the proposed discussion.

Sincerely yours,

Guillermo Picó, M.D.  
President

Nuestra petición fue referida por el Dr. Serra Chavarry a la oficina de la Administración en Washington, la que aceptó nuestra proposición.

Con fecha 6 de noviembre recibimos la siguiente comunicación firmada por el doctor Chaves:

November 6, 1957

Dr. Guillermo Picó  
President  
Puerto Rico Medical Association  
Box 9111  
Santurce, P. R.

Dear Dr. Picó:

We have received from Central Office, three copies of the Format to negotiate fee schedule for medical services with medical associations. The Manager of this center has authorized me to communicate with you in order to open the necessary negotiation.

I am enclosing 3 copies of the above mentioned format which should be filled by the Medical Association. One copy of the proposed fee schedule will go to Central Office, one copy may be retained by the Puerto Rico Medical Association, and the third copy will be filed in this office.

Appendix A, Manual M-1, Change 9, of the Veterans Administration, of which you have a copy, may be used as a guide in determining appropriate allowances. Unlisted items of service for which there is a demand in Puerto Rico may be proposed for inclusion in the schedule by attaching a separate listing, giving information as to the description of the services and recommended fees.

Sincerely,

J. Chaves Estrada, M.D.  
Director, Professional Services

En la última reunión de la Junta de Directores, al ser discutido este asunto, nuestro presidente electo, Dr. Luis Guzmán, informó que él ha iniciado gestiones similares cerca de los dirigentes de Rehabilitación Vocacional, y se sugirió también que éstas se hagan extensivas a todas las demás agencias federales que ofrecen servicios médicos en nuestra Isla.

El estudio de este asunto debe ser puesto bajo un comité especial, que se encargue de determinar, con la ayuda de las secciones de especialidades, tal como se hizo en el caso de Medicare, el valor que se pondrá al punto para de este modo fijar los honorarios a base de una tabla de valores relativos.

### **Asociaciones para la Lucha contra la Tuberculosis:**

Durante nuestra presidencia tuvimos oportunidad de intervenir en diferencias surgidas entre la Asociación General Antituberculosa de Puerto Rico y la Sociedad para Combatir la Tuberculosis en los Niños.

Al enterarnos de estas diferencias propusimos a los presidentes de ambas asociaciones servir de mediadores. Nuestra proposición fue aceptada, y convocamos una reunión de ambos grupos, reunión que se celebró en nuestro edificio y durante la cual reinó una gran camaradería.

En una reunión posterior se aceptaron todos los términos propuestos durante el primer cambio de impresiones, y tenemos hoy la gran satisfacción de informar a ustedes que reina la mayor armonía entre estos dos grupos que tanto bien hacen a nuestro pueblo en su lucha por erradicar la tuberculosis del país.

### **Programa de Medicare**

Es con verdadero placer que informamos a ustedes que el programa de Medicare iniciado en diciembre pasado viene desenvolviéndose con verdadero éxito bajo la hábil dirección del doctor Pou, quien someterá a ustedes un amplio informe sobre el funcionamiento del mismo.

### **Comité de Relaciones entre Profesionales**

El Comité de Relaciones entre Profesionales, bajo la hábil dirección del doctor Francisco E. Mundo, ha realizado una labor muy meritoria en su esfuerzo por redactar un Código de relaciones inter-profesionales de médicos y abogados, el cual se somete a ustedes en el día de hoy para su aprobación.

Este mismo comité ya ha iniciado conversaciones con representantes del Colegio de Farmacéuticos tendientes a estructurar un código similar entre médicos y farmacéuticos.

Quiero hacer público reconocimiento de la gran labor realizada por el doctor Mundo y los miembros de su comité. Sobre todo quiero hacer mención a la iniciativa demostrada por este comité, el cual se impuso una tarea y la realizó a perfección sin necesidad de que la presidencia de la Asociación tuviera que ejercer presión alguna. Es así como deben trabajar los comités de nuestra agrupación.

### **Comité de Mediación y Querellas:**

Otro de los comités que ha realizado una excelente labor, también por iniciativa propia, ha sido el Comité de Mediación y Querellas, presidido por el doctor Enrique Pérez Santiago.

Dicho comité estudió y resolvió satisfactoriamente todas las querellas que le fueron planteadas.

**Comité de Relaciones Públicas:**

Queremos también hacer público reconocimiento de la labor realizada por el Comité de Relaciones Públicas, bajo la hábil presidencia del doctor Roberto Jiménez López. Este comité se ha venido reuniendo regularmente el primero y tercer martes de cada mes, y colaboró muy eficientemente con esta presidencia en la organización de los actos celebrados con motivo de El Día del Médico.

El doctor Jiménez López someterá a ustedes personalmente el informe de su comité.

**Labor de los Comités:**

En términos generales, podemos decir que este año los comités de la Asociación han llenado a cabalidad las funciones que les fueron encomendadas.

No cabe duda que la labor de los dirigentes de la Asociación se hace más fácil si los comités llenan su cometido. Durante los últimos años hemos observado que los compañeros están en mejor disposición de colaborar en este sentido, y es de esperarse que esta misma actitud de cooperación continúe persistiendo en el futuro.

**Médicos Fondo Seguro del Estado:**

En la primera reunión de nuestra Junta de Directores, celebrada el 22 de diciembre ppdo., tuvimos el placer de tener la visita de una delegación de médicos que trabajan para el Fondo del Seguro del Estado, integrada por los compañeros Héctor Marrero Otero, Natalio Bayonet y Eduardo González Celimen. Era el propósito de estos compañeros recabar nuestra cooperación para conseguir que se les extendiera a los médicos que trabajan para dicha agencia gubernamental status de empleados dentro del Servicio por Oposición del Gobierno de Puerto Rico.

Nos informaron estos compañeros en dicha ocasión, que habían estado haciendo gestiones a este respecto cerca del honorable Gobernador y el Sr. Administrador del Fondo del Seguro del Estado desde el 1951, sin que hasta ese momento hubieran tenido éxito en sus gestiones.

Reconociendo los méritos de la petición de estos compañeros inmediatamente iniciamos gestiones en su favor. Nos entrevistamos en relación con este asunto con el señor Administrador del Fondo del Seguro del Estado, licenciado Guillermo Atilés Moreu, el honorable Gobernador y el Director de la Oficina de Personal, Sr. Antonio Cuevas Viret, y finalmente con fecha 4 de septiembre vimos coronados nuestros esfuerzos cuando el honorable Gobernador cursó la siguiente comunicación al Sr. Administrador del Fondo:

Lic. Guillermo Atilés Moreu  
Administrador  
Fondo Seguro del Estado  
San Juan, P. R.

Estimado señor Atilés:

De acuerdo con la facultad que me concede la Ley Núm. 405 del 11 de mayo de 1951, por la presente dispongo la inclusión en el Servicio por Oposición, a partir del primero de octubre de 1957 de todos los puestos de médicos del Fondo del Seguro del Estado, existentes o que se establezcan en el futuro.

Atentamente,  
(fdo.) Luis Muñoz Marín



Esta decisión del honorable Gobernador nos complació doblemente, por la justicia impartida a los compañeros que trabajan para el Fondo del Seguro del Estado y porque nos dió la oportunidad de demostrar a nuestros colegas que cuando se trata de causas justas la Asociación Médica está dispuesta a utilizar todos sus recursos en defensa de los integrantes de su matrícula.

### **Asociación Médica Americana:**

Es acreedora a mención especial en este informe la Asociación Médica Americana por la actitud cooperadora que siempre han demostrado sus dirigentes para con la Asociación Médica de Puerto Rico.

Siempre que hemos recurrido a su Secretario General, doctor Lull, o a su Director de Relaciones Públicas, Sr. Leo E. Brown, en solicitud de orientación y ayuda hemos recibido una inmediata y favorable respuesta.

Cada día que pasa estamos más convencidos de la utilidad de nuestra afiliación con la A.M.A. y de la necesidad y conveniencia de que cada uno de nuestros miembros lo sea a la vez de la Asociación Médica Americana.

Es también imprescindible que el presidente de la Asociación Médica acompañe a nuestro delegado a las dos reuniones que celebra la A.M.A. todos los años, de manera que podamos aumentar nuestros nexos y nos mantengamos al tanto de sus problemas que son más o menos los mismos con los cuales tenemos que bregar nosotros localmente.

Y ahora que mencionamos este hecho, quiero aprovechar la ocasión para comunicar un acuerdo adoptado por la directiva en una de sus recientes reuniones regulares, al efecto de que se solicite de la Cámara que autorice que se aumente la partida de gastos del presidente de \$500 a \$2,000. El presidente, lo sabemos por propia experiencia, tiene que celebrar un gran número de actos de carácter social y tiene que asistir a otros muchos. Si a todo eso le agregamos la obligación de asistir a las reuniones de la A.M.A. lo más razonable es que le proporcionemos los medios para ello, evitando así el que además de dar su tiempo tenga que disponer de sus recursos para cubrir los gastos en que incurre por su condición de presidente.

Quiero asimismo aprovechar esta ocasión para reiterar la gratitud de nuestra Asociación al querido compañero que durante los últimos años ha venido representándonos ante la Asociación Médica Americana. Para mí fue muy interesante observar la soltura con que se desenvuelve nuestro delegado en el más alto cuerpo representativo de la clase médica americana y la gran simpatía de que goza entre todos los miembros de la Cámara. Los nexos que ha logrado establecer Fruto Sánchez Castaño son de gran beneficio para la clase médica puertorriqueña, y por ello es acreedor a nuestro más sincero reconocimiento.

### **Asesores Legales:**

No queremos dejar de pasar esta ocasión sin hacer público reconocimiento de la gran ayuda que nos ha prestado este año, nuestro asesor legal, el licenciado José G. González y su hijo el licenciado Richard González.

Durante el período de estudio y preparación de los proyectos de ley para autorizar la organización del Escudo Azul, el licenciado Richard González asistió a todas las reuniones del comité y laboró muy eficazmente en las discusiones que se suscitaron con motivo de dicho proyecto. Más luego el licenciado José González asistió a una de las reuniones celebradas con la Junta de Regentes de la Cruz Azul, y colaboró muy eficazmente en la redacción del acuerdo suscrito entre la Asociación Médica y La Cruz Azul, el cual aparece transcrito anteriormente.

Tuvimos la cooperación de nuestros asesores en conexión con una reclamación que tuvimos que hacer en relación con Medicare. Han sido muchas las veces que hemos tenido necesidad de recurrir a nuestros asesores y siempre les hemos encontrado en la mejor disposición de ayudarnos.

Los licenciados González son acreedores a nuestra más sincera gratitud.

### **Cooperativas médicas**

El movimiento cooperativista va adquiriendo gran auge en nuestro país y ya se están dando los primeros pasos para la organización de cooperativas médicas.

Es este un asunto que demandará toda nuestra atención el próximo año cuando posiblemente surgirá en nuestro país la primera cooperativa médica. Es deber de cada uno de nosotros estar al tanto de este movimiento para vigilar que desde su comienzo llene todos los requisitos que podrían hacerla acreedora al reconocimiento de la Asociación Médica de Puerto Rico.

### **Secretario de Salud**

Para nosotros constituyó una gran sorpresa la renuncia de su cargo presentada por el doctor Juan A. Pons a raíz de haber cumplido diez años de servicio al pueblo de Puerto Rico como Secretario de Salud, y al poco tiempo de haberle rendido nuestra Junta de Directores un cálido tributo de simpatía.

Recientemente hemos recibido del doctor Pons una elocuente carta la cual me complace en transcribir a continuación:

"Mi estimado Guillermo:

Mi nueva y no tan fácil tarea de estudiante me mantiene bastante ocupado y distraído pero no tanto como para que deje de recordar con frecuencia y con afecto a los buenos amigos de tantos años, en particular a los compañeros de la Asociación y a los que en mis varias gestiones profesionales me acompañaron, ora como mentores, ora como discípulos — si así puede llamárseles durante sus años formativos de internos y residentes en los hospitales en que intervine profesionalmente, y a los muchos que conmigo colaboraron en las gestiones de orden público en que he participado.

A todos los que todavía son, porque en el correr de los muchos años muchos no están ya entre nosotros, quisiera por tu conducto enviar mi más cordial saludo desde esta aula en que trato de prepararme para mejor poder servir a cuantos pueda. En particular quisiera una vez más agradecer las expresiones de afecto que ustedes me hicieron, bien colectiva o personal e individualmente, al cumplirse los diez años de mi gestión de gobierno y al decidir poco después que debía ya abandonarla. No he podido asegurarme todavía de que merezco todas las bondades que ustedes me dispensaron.

Espero esté satisfecho de tus logros durante el año que has presidido la Asociación. Personalmente siento no haberte podido ayudar más efectivamente, especialmente en relación con la idea del nuevo solar para el nuevo edificio".

Cordialmente,

Toñín

La renuncia del doctor Pons dió motivo al nombramiento de otro querido amigo, el doctor Guillermo Arbona, quien también se ha dedicado por muchos años a servir a nuestro pueblo en el campo de la salud pública.

La actitud de franca camaradería asumida por el doctor Arbona desde el momento preciso en que tomó posesión de su cargo y su disposición a recibir el asesoramiento de la Asociación Médica de Puerto Rico en los asuntos de mayor trascendencia, ha hecho renacer en nosotros la esperanza de mayores logros en materia de salud pública en nuestro país y ha ganado al nuevo incumbente la simpatía de toda la clase médica puertorriqueña.

Hacemos votos sinceros porque perduren las buenas relaciones establecidas entre el Departamento de Salud y la Asociación Médica de Puerto Rico para beneficio de la comunidad en general.

### **Práctica ilegal de la Medicina:**

Respondiendo a un llamamiento que hiciera a nuestra directiva el presidente del Tribunal Examinador de Médicos, doctor Luis A. Sanjurjo, procedimos a nombrar un comité especial para investigar la práctica ilegal de la medicina en nuestro país, cuyo comité preside el doctor Fruto Sánchez.

Dicho comité ha recopilado bastante información, la cual hemos puesto a disposición del Tribunal Examinador de Médicos.

Tuvimos el placer de concurrir en unión del doctor Sánchez Castaño a una entrevista con el honorable Secretario de Justicia, y dos de sus auxiliares, y le expusimos francamente toda la situación de la práctica ilegal de la medicina, prometiéndonos investigar en su totalidad cada uno de los casos sometidos.

### **Estudiantes de Medicina:**

Recientemente compareció una delegación de la Asociación de Estudiantes de la Escuela de Medicina de la U.P.R. integrada por los presidentes de las distintas clases a una reunión de nuestra Junta de Directores y tuvimos oportunidad de cambiar impresiones sobre todos los problemas con que se confronta dicho grupo.

Ofrecimos a dichos jóvenes estudiantes toda la cooperación de la Asociación Médica y nos proponemos celebrar reuniones de esta naturaleza con más frecuencia para mantenerlos debidamente orientados en cuanto a los distintos problemas con que se confronta la clase médica puertorriqueña.

### **Nuestro Edificio:**

Durante todo el año hemos estado haciendo gestiones en unión con el presidente del Comité de Edificio, doctor Ricardo F. Fernández, con miras a solucionar el problema de la construcción de nuestro nuevo edificio.

Hemos sostenido sendas entrevistas con el honorable Secretario del Interior, Sr. Roberto Sánchez Vilella, tendientes a obtener un solar apropiado en un sitio accesible; pero hasta la fecha nuestras gestiones no han progresado.

Más adelante el doctor Fernández nos informará en detalle sobre este asunto.



**Comité conjunto Asociación Hospitales y Asociación Médica:**

Recientemente nombramos un comité presidido por el doctor Costa Mandry para que conjuntamente con otro comité designado por el presidente de la Asociación de Hospitales, proceda a realizar un estudio de los servicios médicos y hospitalarios en Puerto Rico.

Este comité ha comenzado a laborar en la recopilación de datos y se ha requerido una asignación de \$1,000 por parte de nuestra Asociación para hacer frente a los gastos iniciales de dicho estudio. La Asociación de Hospitales asignará otra suma similar para tal propósito.

Nos permitimos recomendar la aprobación de dicha asignación de \$1,000 y que se autorice a nuestra directiva a hacer otro desembolso adicional si así fuere necesario. Consideramos que la recopilación de datos por parte de este comité conjunto es de gran importancia para nuestras dos agrupaciones y nos servirán de base para poder contrarrestar cualquier dato erróneo que pueda surgir del estudio que actualmente están llevando a cabo los representantes de Columbia.

**Médicos graduados de escuelas no reconocidas:**

La directiva de nuestra Asociación y el Comité de Credenciales se han confrontado este año con un problema que reviste gran importancia.

Hay actualmente en nuestra Isla un gran número de compañeros que han venido ejerciendo la medicina por varios años, que han aprobado los exámenes del Tribunal Examinador de Médicos y que gozan de gran simpatía en la comunidad y con sus demás compañeros de profesión por su comportamiento general. Esos médicos están deseosos de pertenecer a nuestra agrupación y lo único que hasta ahora les ha impedido su ingreso a la Asociación ha sido el hecho de no ser graduado de una escuela reconocida.

Nuestra directiva, después de un amplio cambio de impresiones sobre este asunto, acordó someter a la consideración de ustedes la siguiente enmienda a la Sección Primera del Artículo Primero de nuestro reglamento:

"Disponiéndose, que la Junta de Directores podrá eliminar el requisito de la escuela reconocida, siempre y cuando el candidato haya tomado un año de estudios postgraduados en una escuela reconocida por dicha Junta de Directores".

**Lee Optical Co.**

Hemos dejado para último término el asunto relacionado con la Lee Optical Co. por considerar que el mismo reviste gran importancia.

Hace más o menos mes y medio estuvieron a verme representantes de la Asociación de Optómetras de Puerto Rico para exponerme la situación que les había creado la Lee Optical Co. al trasladarse a Puerto Rico para abrir un gran número de ópticas e iniciar el sistema de reclamo directo a través de la Prensa, Radio y Televisión. Hasta ese momento no veía nada malo en el asunto, puesto que no es nuestra norma intervenir en los negocios ajenos; pero acto seguido se me informó que en vista de que los optómetras puertorriqueños habían rehusado trabajar para dicha firma ellos habían contratado los servicios de dos jóvenes médicos, y los habían puesto al frente de dos de sus oficinas.

Esto cambió de inmediato nuestro criterio y procedimos a llamar para una entrevista a los dos compañeros aludidos. Ellos acudieron a nuestra llamada, y después de un amplio cambio de impresiones que

celebramos estando presentes además el doctor Roberto Buxeda y Sánchez, y durante el cual le hicimos ver que ellos estaban violando los principios de ética de nuestra Asociación y les expusimos que se exponían a correr el riesgo de una demanda de malpractice por no tener ellos la debida preparación para poder desempeñar cabalmente el cargo que estaban ocupando, aceptaron nuestra sugestión al efecto de que renunciaran sus empleos con dicha compañía.

Los referidos compañeros cumplieron su compromiso y días más tarde la Lee Optical publicó en la Prensa del país, un aviso redactado en los siguientes términos:

#### DOCTORS WANTED

"To specialize in eye-examination only. Position available for licensed physician. Will give necessary instruction and training. Starting salary \$12,000 per year — plus life insurance, health and accident benefits for himself and family, pension and retirement, plus other fringe benefits. No age limit or past specialization needed. Future assured. If interested, write to Box 2181, San Juan, Puerto Rico. Appointment and interview in strict confidence".

Tan pronto nos enteramos de dicho anuncio procedimos a enviar la siguiente carta circular a todos los médicos de Puerto Rico:

"Estimado compañero:

En la prensa de hoy aparece un anuncio en el cual se ofrece una plaza para médico interesado en hacer exámenes de la vista.

Deseamos informar a la clase médica que siguiendo los consejos de nuestra Asociación dos jóvenes médicos han renunciado dichas posiciones en el área metropolitana, por estar éstas en conflicto con los cánones de ética médica.

Suplicamos a todo médico que pueda estar interesado en la plaza que se ofrece en dicho anuncio tenga la bondad de comunicarse con el suscribiente antes de aceptar la misma".

Cordialmente,  
(fdo.) Guillermo Picó, M.D.  
Presidente

Al día siguiente de estar circulando nuestra carta ya estaba en poder del dueño de la Lee Optical y su abogado, lo que nos induce a creer que poco a poco en nuestra clase profesional se han ido infiltrando colegas en los cuales no podemos depositar plena confianza. El caso es que horas más tarde se presentaba a mi oficina el licenciado Isaías Rodríguez Moreno en compañía del señor Ted Shambaun, dueño de la Lee Optical Co. Venían dichos señores a protestar por la actitud asumida por la Asociación y al poco rato de conversación, viendo la actitud hostil de estos señores y sus manifestaciones de que harían responsable a nuestra Asociación en las Cortes, les invité a retirarse y les dije que podían tratar el asunto con nuestros abogados. Más tarde se trasladaron a la Asociación y el licenciado Rodríguez Moreno presentó al Sr. Shambaun como un médico al Sr. Sánchez. Procuraron una copia del Reglamento de la Asociación y otra copia del Código de Ética. Afortunadamente mientras ellos estaban en la Asociación, me comuniqué con Sánchez y le enteré de que ya dichos señores habían estado en mi oficina, y le sugerí los invitara a volver por la Asociación cuando yo pudiera estar presente. La noche de ese mismo día me entrevisté con el licenciado González, nuestro asesor legal quien me aconsejó no me preocupara y le refiriera a él toda correspondencia que nos llegara de estos señores.

Con fecha 5 de noviembre el licenciado Rodríguez Moreno nos envió la siguiente carta:

Dr. Guillermo Picó  
Presidente,  
Asociación Médica de Puerto Rico  
San Juan, Puerto Rico

Estimado Dr. Picó:

Confirmando conversación sostenida con usted en el día de ayer deseo llamar su atención a nombre de mi representada Lee Optical Co. of Puerto Rico, Inc., al hecho de que la ley que creó la Junta Examinadora de Optómetras y que regula la profesión de optometría en Puerto Rico en ningún momento prohíbe que médicos-cirujanos trabajen o se dediquen al ejercicio de la optometría en Puerto Rico. A tal efecto dispone la Sección 529 lo siguiente:

Las secs. 521 al 529 de este título no afectarán a los médicos cirujanos debidamente autorizados para practicar la profesión en Puerto Rico ni a los optómetras que con anterioridad a la aprobación de dichas secciones poseyeran licencias para practicar, expedidas por el Tribunal Examinador de Médicos de Puerto Rico".

Asimismo he estado estudiando el Capítulo VII - Sec. 3 del panfleto "Principles of Medical Ethic of the Am. Med. Ass'n" y el mismo tampoco prohíbe que los médicos cirujanos se contraten para dedicarse al ejercicio de la Optometría.

Mi cliente no tiene duda que la intervención de la Asociación Médica de Puerto Rico le está ocasionando serios daños a su reputación y al objeto que los trajo a Puerto Rico. Por tal motivo desea que a la mayor brevedad posible cite usted al Comité de Etica de la Asociación Médica de Puerto Rico con el objeto de comparecer a tal comité o a su Junta de Directores para exponer las razones que tiene de manera que quede aclarada esta embarazosa situación.

Asimismo tiene mi cliente información en el sentido de que los Optómetras de Puerto Rico están diseminando noticias falsas en cuanto a que la Asociación Médica de Puerto Rico está en contra de ella.

Siendo esta una situación de suma urgencia y estando mi cliente sufriendo irreparables daños, respetuosamente solicito la antes mencionada vista a la mayor brevedad posible.

A nombre del Sr. Ted Shambaun y del mío propio deseo darle las gracias por las cortesías que tuvo ayer con nosotros mientras le visitamos en su oficina.  
Sin otro particular, quedo de usted,

Muy atentamente,  
Isaías Rodríguez Moreno

Revisando con más detenimiento el Código de Etica encontramos las siguientes disposiciones:

#### SECTION 6

"A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care".

#### Chapter 1 — Section 4

Sec. 4. Solicitation of patients, directly or indirectly, by a physician, by groups of physicians or by institutions or organizations is unethical. This principle protects the public from the advertiser and salesman of medical care by establishing an easily discernible and generally recognized distinction between him and the ethical physician.

#### Chapter VII — Section 5

A physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit exploitation of the services of the physician for the financial profit of the agency concerned. Such a procedure is beneath the dignity of professional practice and is harmful alike to the profession of medicine and the welfare of the people.



En junio de 1955 la Cámara de Delegados de la Asociación Médica Americana aprobó la Resolución No. 77, que dispone como sigue:

"associations between doctor of medicine and optometrists are unethical".

Es evidente que si la Lee Optical Company ofrece sus servicios por conducto de un médico estará violando la ley de la práctica de la medicina, puesto que dicha corporación no está autorizada para ejercer la medicina y lo estaría haciendo indirectamente. Este es un principio que ya ha sido declarado ilegal en el conocido pleito de Iowa entre un grupo de médicos contra hospitales de aquel estado que tenían a sueldo patólogos y anestesiólogos. Este es un punto que ya tiene bajo estudio nuestro asesor legal para proceder en corte contra la Lee Optical en caso que insista en seguir contratando los servicios de médicos para ponerlos al frente de su negocio.

Respetuosamente solicitamos de esta honorable Cámara de Delegados que estudie este asunto con detenimiento y recomendamos se adopte un acuerdo reafirmando la decisión tomada por la Cámara de Delegados de la Asociación Médica Americana, al efecto de que estará violando nuestros principios de ética todo médico que voluntariamente se asocie con dicha corporación.



Esto es todo cuanto tengo que informarles. Por nuestra correspondencia y cartas mensuales ustedes se han mantenido al tanto de nuestras gestiones. Una vez más agradezco a los miembros de la Cámara la deferencia que tuvieron para conmigo al elevarme al alto sitial de presidente de nuestra Asociación. A mis compañeros de directiva, a los presidentes de comités y a nuestro Secretario Ejecutivo, Sr. Jesús A. Sánchez, mi gratitud sincera por la cooperación que todos me brindaron, y la cual hizo más llevadera la tarea que tuvieron a bien encomendarme. Muchas gracias a todos.

Cordialmente,  
Guillermo Picó, M.D.  
Presidente

## INFORME DEL TESORERO

AÑO 1957

### **Sr. Presidente; señores miembros de la Cámara:**

Una vez más me complace en comparecer ante ustedes para rendirles cuenta del movimiento económico habido durante el pasado año en nuestra Asociación.

Con motivo de haberse anticipado un mes en la celebración de nuestra asamblea, cerramos nuestras operaciones al 31 de octubre ppdo.

La intervención de las cuentas por nuestros auditores se llevó a efecto parte durante el mes de septiembre y las operaciones hasta el 31 de octubre fueron revisadas durante las primeras dos semanas de noviembre. Nos han ofrecido entregarnos su informe a tiempo para que podamos adjuntarlo con el presente.

Vamos a enumerar en primer término aquellas cuentas que han motivado los ingresos habidos durante este año en nuestro erario:

#### **Cuotas:**

Hasta el día 31 de octubre los ingresos registrados por concepto de cuotas de miembros han montado a \$21,586.50, lo que representa un aumento de \$661.50 sobre el total cobrado el año pasado.

Actualmente nuestro registro de socios tiene un total de **799**. De éstos hay 63 fuera de Puerto Rico; 7 de ellos han pagado la cuota completa, 33 han pagado solamente la parte de la cuota correspondiente al Auxilio Médico Mutuo, los otros 23 no han pagado cuota alguna.

Actualmente tenemos los siguientes compañeros exentos de pagar la parte de la cuota correspondiente a la Asociación:

#### **Por su edad**

- |                            |                            |
|----------------------------|----------------------------|
| 1. Alúm Pérez, José        | 8. Janer, Ana              |
| 2. Belaval, José S.        | 9. Janer, Fernando H.      |
| 3. Berríos, Manuel B.      | 10. Malaret, Pedro         |
| 4. Bird, Jorge             | 11. Montalvo Guenard, A.   |
| 5. Dunscombe, William C.   | 12. Morales Ruiz, J. S.    |
| 6. García de Quevedo, Luis | 13. Robert de Romeu, Marta |
| 7. González, Carlos        | 14. Rolenson, Julio R.     |

En su última reunión la Junta de Directores aprobó eximir del pago de esta parte de la cuota a los siguientes compañeros, quienes empezarán a disfrutar de este privilegio el próximo año:

Dr. Pascual A. Rivera Porrata

Dr. José M. Torres Cintrón

También están exentos del pago de la parte de la cuota correspondiente a la Asociación, por estar haciendo una residencia, los siguientes compañeros:

1. Bernal Rosa, José F.
2. Irizarry, Jaime E.
3. Morales, Carlos E.
4. Sáez, Florencio

En la categoría de miembros afiliados tenemos en la actualidad los siguientes compañeros:

- |                                |                              |
|--------------------------------|------------------------------|
| 1. Bosch, José E.              | 11. Llenza, Charles F.       |
| 2. Bladuell Ramos, Wallace     | 12. Martínez, Zenobio R.     |
| 3. Cummings, Luis              | 13. Olmo, Jaime Alberto      |
| 4. Dávila Polanco, José B.     | 14. Pagán Luna, Victoriano   |
| 5. Frank, Julio E.             | 15. Rigau, José M.           |
| 6. Fernández Isales, Ramón     | 16. Rivera Ayala, Gustavo A. |
| 7. González Flores, Bernardino | 17. Rubio, Luis A.           |
| 8. Guerrero, Rafael            | 18. Romero, Angel M.         |
| 9. Justiniano, Raúl T.         | 19. Shepard, Jack            |
| 10. López Morales, Juan L.     | 20. Ubiñas Sorbá, Luis A.    |

Al 31 de octubre tenemos un total de 102 compañeros que adeudan a la Asociación por concepto de cuotas. Del total de \$5,469.00 adeudado por estos compañeros la cantidad de \$3,434.00 pertenece a los fondos generales de la Asociación y el balance de \$2,035.00 corresponde a los fondos del Auxilio Médico Mutuo. (Véase relación de los médicos que adeudan cuotas en la página 50 de este informe).

Entre los médicos que adeudan cuotas hay 13 que deben dos años. La Junta de Directores no ha tomado acción para darles de baja en la esperanza de que se pongan al día durante el curso de este mes. De lo contrario procederemos a eliminar sus nombres de nuestra lista de socios.

### **Auxilio Médico Mutuo**

Los ingresos habidos por concepto de cuotas en la cuenta del Auxilio Médico Mutuo este año han montado a \$13,140.00. Las cuentas de ahorros del Auxilio han producido intereses por la cantidad de \$1,020.21, lo que eleva los ingresos a un total de \$14,160.21.

Este año tuvimos el sensible fallecimiento de la estimada compañera doctora Susana Igartúa de Ramírez, y procedimos también a satisfacer la póliza del doctor Alfredo V. Bou, quien falleciera el año pasado. Además pagamos los honorarios del doctor Toro, quien hiciera un estudio actuarial del programa a petición de la Directiva y la Junta del Auxilio Médico Mutuo. El total de egresos ha sido pues de \$3,500, que restado del total de ingresos, nos deja un balance neto de \$10,660.21, que han pasado a engrosar los fondos del Auxilio, que ahora arrojan un balance total de \$73,075.82, sin contar con los intereses que nos han devengado los bonos del plan.

Como ya dijimos anteriormente hay un total de \$2,035 por cobrar por concepto de cuotas.

### **Boletín Médico**

Hasta el momento en que redactamos este informe se han publicado 9 ediciones del Boletín, o sea de septiembre 1956 a mayo, 1957.

Los ingresos habidos este año por concepto de anuncios en el Boletín han montado a \$6,294.67, y hemos tenido egresos por valor de \$5,535.36. En la página 53 incluimos una relación de todos los anuncios publicados en estas 9 ediciones, el total cobrado, las cuentas por cobrar y lo cobrado por anuncios en ediciones anteriores.



**Vitrinas para exhibiciones permanentes:**

Durante este año perdimos dos de los auspiciadores de vitrinas, las firmas Pet y Gerber; pero aún así hemos tenido un ingreso de \$1,540.00 por dicho concepto, y cuentas por cobrar montantes a \$310.00.

**Cursos Postgraduados**

La Junta de Cursos Postgraduados auspició este año cuatro cursos postgraduados, los cuales estuvieron a cargo de los siguientes conferenciantes:

1. Dr. Maurice N. Ritcher
2. Dr. Samuel Proger
3. Dr. Demetrio Sodi Pallares
4. Dr. Ignacio Chávez

Los ingresos habidos este año por concepto de cursos se dividen como sigue:

Cursos del año pasado	\$ 450.00
Los cuatro cursos de este año	4,025.00

Total cobrado	\$4,475.00
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Los egresos pagados hasta el 31 de octubre han montado a:

	\$3,606.60
Gastos por pagar	145.60

Total gastos	\$3,752.20
--------------	------------

que restado del total del producto cobrado de los cuatro cursos nos da un sobrante de \$272.80.

Tenemos a esta fecha las siguientes cuentas por cobrar:

Departamento de Salud	\$200.00
Dr. Rafael A. Blanes	20.00
Dra. Lillianne Ferrer Piñero	20.00
Dr. Egidio S. Colón Rivera	20.00
Dr. Eduardo Montilla	20.00

Total por cobrar	\$280.00
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**Locales para Exhibición durante la Asamblea:**

Estamos incluyendo en este informe una relación de las firmas que han contratado espacio para la exhibición de sus productos durante nuestra próxima convención. El total de ingresos por este concepto montará este año a \$5,600.00. De dicho total ya hemos cobrado hasta el 31 de octubre la cantidad de \$1,150.00.

**Cuentas de Ahorros:**

Al final de este informe reproducimos una relación de las cuentas de ahorro que tiene actualmente nuestra Asociación. Al 31 de octubre tenemos 11 cuentas de ahorro que se distribuyen como sigue:

	<b>Total</b>
4 cuentas del Auxilio Médico Mutuo	\$43,042.35
2 cuentas de la Asociación	16,690.25
1 cuenta del Club Médico	4,321.02
4 cuentas del Fondo Pro Edificio	42,559.05

Total	\$106,612.67
-------	--------------

Los intereses devengados por dichas cuentas de ahorro hasta el 30 de junio de 1957 montaron a \$2,749.26.

**Bonos:**

Acompañamos también al final de este informe una relación de los bonos en nuestro poder, que al igual que el año anterior, están distribuidos en la forma siguiente:

de la Asociación	\$ 780.00
del Auxilio	22,900.00
Total	<hr/> \$23,680.00

Esto representa el valor al adquirirlos. Los primeros 7 bonos en la lista ya están vencidos, toda vez que fueron adquiridos en marzo del 1944.

Nos permitimos recomendar al nuevo Tesorero proceda a redimir los mismos y que la cantidad obtenida se reinvierta en nuevos bonos para que así podamos seguir disfrutando del interés.

**Club Médico**

El Club Médico ha seguido operando normalmente durante el año en curso.

Este año se han registrado ventas por \$2,766.15, que unido a los intereses devengados por la cuenta de ahorros, nos da un ingreso total de \$2,895.32.

Los egresos hasta el 31 de octubre montaron a \$2,684.02, que restado del total de ingresos arroja un beneficio de \$211.30, sin contar las cuentas por cobrar, que al 31 de octubre montan a \$255.25. Una vez hayamos cobrado lo adeudado, el beneficio del año montará a \$466.55.

Durante el año se ha obsequiado a distintos grupos por parte de la directiva, el señor presidente y varios comités y el consumo total ha montado a \$187.40. Esta cantidad puede interpretarse como otro beneficio adicional del Club, ya que aún cuando el Club no la ha recibido tampoco ha sido una erogación para la Asociación.

La mercancía en el Club al pasar balance el 31 de octubre tiene un valor de \$382.04, o sea \$22.15 menos que la que había al cerrar nuestros libros el año pasado.

**Directorio Médico:**

Este año hemos tenido otra cuenta a nuestro cargo, que es la que representa la publicación del Directorio Médico en el periódico El Mundo. Esto ha representado un trabajo adicional para el personal de oficina, que ha tenido que ocuparse de preparar recibos mensualmente para los médicos que tienen su anuncio en el Directorio, y contabilizar el movimiento habido en dicha cuenta.

Al final del informe insertamos una lista de los compañeros que nos adeudan por este concepto al 31 de octubre.

**Medicare:**

También nos hemos encargado de la parte administrativa del programa de Medicare.

Como ustedes saben, la Asociación creó un fondo especial para Medicare de \$20,000, y se abrió una cuenta especial en el Banco Crédito y Ahorro Ponceño. El tesorero conjuntamente con el Sr. Presidente hemos firmado todos los cheques de esta nueva cuenta.

El doctor Pou, presidente del Comité de Medicare hará a ustedes un informe detallado del movimiento de este nuevo programa.

### **Gastos Generales:**

Los gastos generales de la Asociación se han mantenido más o menos dentro de los límites de las partidas autorizadas en el presupuesto.

### **Balance al 31 de octubre:**

Al final del informe se incluye una serie de estados demostrativos de las transacciones realizadas por esta tesorería durante el período al cual se refiere el mismo.

Damos a continuación un resumen de la situación económica de la Asociación al 31 de octubre:

#### **CUENTA DE LA ASOCIACION**

Banco Popular de Puerto Rico	\$ 7,237.14	
Bonos	780.00	
Crédito y Ahorro Ponceño (Ahorros)	16,690.25	
First Federal Savings Assn. (Ahorros)	32,559.05	
Chase Manhattan Bank (Ahorros)	10,000.00	\$67,266.44

**Nota:** En este balance están incluídos los siguientes fondos especiales:

		\$67,266.44
Asoc. Médica Dito. Este	\$ 1,205.17	
Comité de Damas Auxiliares	1,398.75	
Fondo del Edificio	46,827.69	
Fondo Hosp. Dr. González Martínez	110.00	
Sección de Cardiología	22.00	
Sección de Dermatología	308.80	
Sección de Medicina General	123.19	
Sección de Oftal. y Otorrino.	95.00	
Sección de Pediatría	896.69	\$50,987.29
BALANCE EL 31 DE OCTUBRE, 1957		\$16,279.15
MAS		
FONDO ESPECIAL MEDICARE		20,000.00
BALANCE NETO		\$36,279.15

#### **CUENTA DEL AUXILIO MEDICO MUTUO**

Banco Popular de Puerto Rico	\$ 7,133.47	
Crédito y Ahorro Ponceño (Ahorros)	22,363.26	
First Federal Savings Assn. (Ahorros)	10,679.09	
The First Nat. City Bank (Ahorros)	10,000.00	
Bonos	22,900.00	
Balance el 31 de octubre, 1957		\$73,075.82



**CUENTA DEL CLUB MEDICO**

Banco Popular de Puerto Rico	\$ 1,657.73	
Crédito y Ahorro Ponceño	4,321.02	
	<hr/>	
Balance el 31 de octubre, 1957		\$ 5,978.75

**Proyecto de Presupuesto:**

Estamos acompañando a este informe el proyecto de presupuesto para el año 1958, el cual ha sido discutido por el Comité de Finanzas de la Cámara. Como podrán ustedes ver, en dicho proyecto de presupuesto hacemos un análisis de los gastos habidos durante el año que termina.

Cordialmente,

C. José Ferraioli, M.D.  
Tesorero



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